

DEAN'S STEAM FITTER'S
COMPUTATION
AND PRICE BOOK

Earning and Labor.

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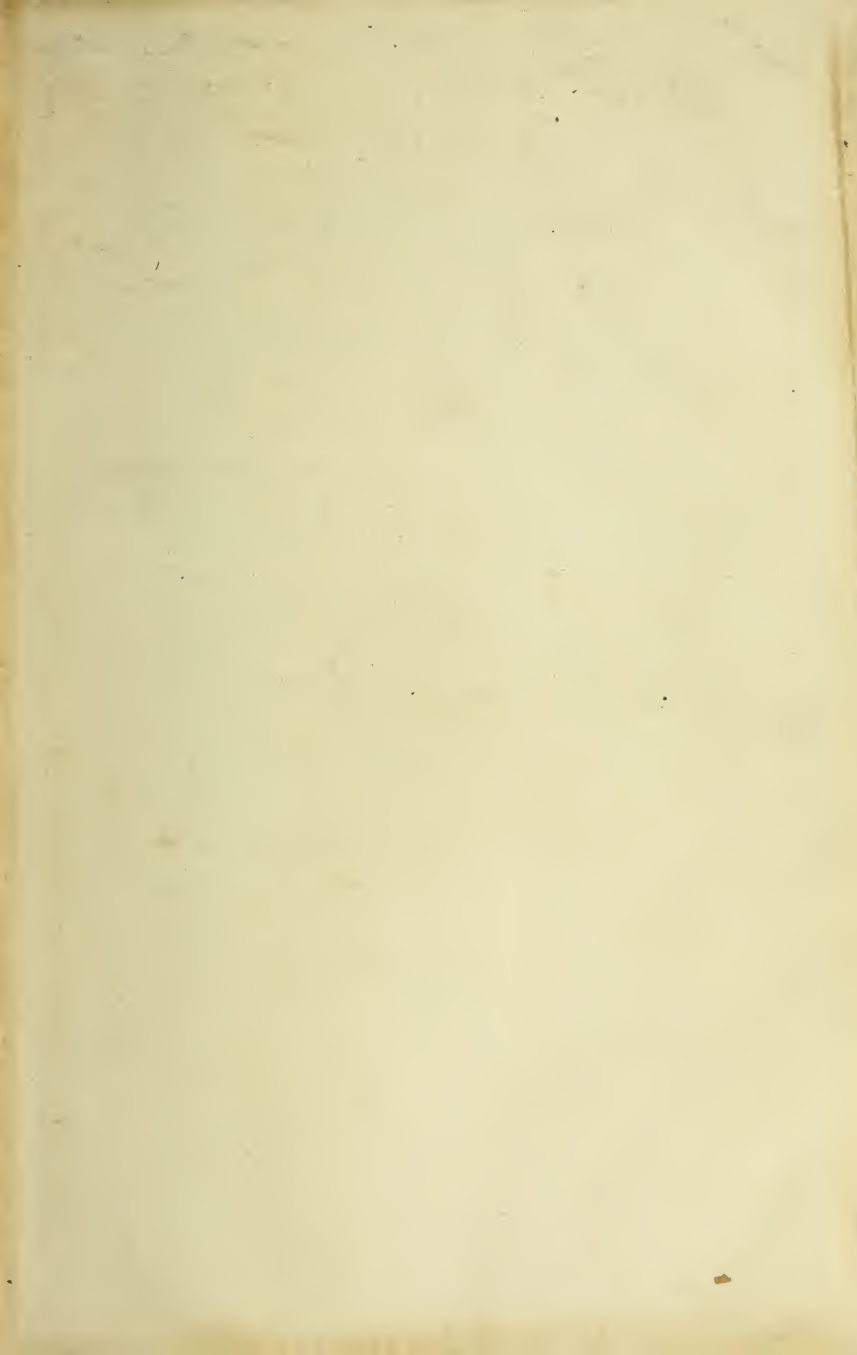
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THE STEAM FITTERS'

COMPUTATION AND PRICE BOOK

CONSISTING OF

TABLES GIVING THE CUBICAL CONTENTS OF ROOMS OF VARIOUS SIZES

TABLES GIVING THE NUMBER OF SQUARE FEET OF WALL SURFACE

TABLES GIVING THE NUMBER OF SQUARE FEET OF WINDOW

SURFACE. TABLES GIVING RADIATION REQUIRED

FOR ROOMS OF ANY SIZE AT VARIOUS

PROPORTIONS.

ALSO TABLES SHOWING THE COST OF RADIATION AT VARIOUS

PRICES PER SQUARE FOOT. TABLES GIVING SIZE, PRICE,

WEIGHT, ETC., OF PIPE, FITTINGS, VALVES, ETC.

BLANK FORMS FOR COST AND PRICE OF MATERIAL.

IN ADDITION TO WHICH IS SOME GENERAL INFORMATION ON POINTS OF INTEREST TO STEAM AND HOT WATER FITTERS.



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PREFACE.

Having felt the necessity of computed tables in determining radiation, I have figured out those which I think will be most useful to the fitter and arranged them in this book in what I trust will be found convenient form. I have also given lists of materials in common use, with blank spaces for costs and prices, to enable those who desire it to have complete data for estimating contracts. To accommodate those who need the tables only, this book is issued leaving out all pages between 80 and 237, at the same price, \$2.50.

Cuts of radiators and boilers have been shown to assist the fitter in explaining the merits of the goods he handles. All of these cuts, both of radiators and boilers, have been given by their respective manufacturers, and I take this opportunity of thanking them for the same.

THE AUTHOR.

EXPLANATION TO TABLES

OF CUBICAL CONTENTS ON THE FOLLOWING PAGES.

Each table covers two pages.

To find the cubical contents of any room, first turn to the page having the desired height ceiling; this you will find marked in the upper left-hand or upper right-hand corner of the page in large figures. Follow along the row of figures at the top until you come to a number representing the width of the room. Follow down the column of figures immediately under this number until you come opposite a number in the column of figures at the left-hand side of the page representing the length of the room, and the amount found here, under the width and opposite the length, is the cubical contents of any room having those dimensions. Proceed in the same manner to find the cubical contents of any room.

NOTE. It is not expected that every one will find themselves familiar with these tables at sight, but a very little time spent in looking over the different forms will make them of indispensable value.

I wish to call special attention to the tables giving "Cost of Radiation," pages 68 to 75 inclusive. These tables can be used for many different purposes. For example, on page 68 we find 24 feet of radiation, at $19\frac{1}{2}$ cents per foot, costs \$4.68. We will suppose it is fittings you wish to figure. Simply call the "amount" the number of fittings and the "price per foot" the cost each; thus, 24 4 inch bushings, at $19\frac{1}{2}$ cents each, equal \$4.68. Or we will suppose you wish to know the cost of 57 feet of pipe at $20\frac{1}{4}$ cents per foot; look opposite 57 and under $20\frac{1}{4}$, and you find the result \$11.54, and so on. This table can be used for anything covered by the prices and amounts used.

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	72																			
3½	84	98																		
4	96	112	128																	
4½	108	126	144	162																
5	120	140	160	180	200															
5½	132	154	176	198	220	242														
6	144	168	192	216	240	264	288													
6½	156	182	208	234	260	286	312	338												
7	168	196	224	252	280	308	336	364	392											
7½	180	210	240	270	300	330	360	390	420	450										
8	192	224	256	288	320	352	384	416	448	480	512									
8½	204	238	272	306	340	374	408	442	476	510	544	578								
9	216	252	288	324	360	396	432	468	504	540	576	612	648							
9½	228	266	304	342	380	418	456	494	532	570	608	646	684	722						
10	240	280	320	360	400	440	480	520	560	600	640	680	720	760	800					
10½	252	294	336	378	420	462	504	546	588	630	672	714	756	798	840	882				
11	264	308	352	396	440	484	528	572	616	660	704	748	792	836	880	924	968			
11½	276	322	368	414	460	506	552	598	644	690	736	782	828	874	920	966	1012	1058		
12	288	336	384	432	480	528	576	624	672	720	768	816	864	912	960	1008	1056	1104	1152	
12½	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
13	312	364	416	468	520	572	624	676	728	780	832	884	936	988	1040	1092	1144	1196	1248	1300
13½	324	378	432	486	540	594	648	702	756	810	864	918	972	1026	1080	1134	1188	1242	1296	1350
14	336	392	448	504	560	616	672	728	784	840	896	952	1008	1064	1120	1176	1232	1288	1344	1400
14½	348	406	464	522	580	638	696	754	812	870	928	986	1044	1102	1160	1218	1276	1334	1392	1450
15	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
15½	372	434	496	558	620	682	744	806	868	930	992	1054	1116	1178	1240	1302	1364	1426	1488	1550
16	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
16½	396	462	528	594	660	726	792	858	924	990	1056	1122	1188	1254	1320	1386	1452	1518	1584	1650
17	408	476	544	612	680	748	816	884	952	1020	1088	1156	1224	1292	1360	1428	1496	1564	1632	1700
17½	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1330	1400	1470	1540	1610	1680	1750
18	432	504	576	648	720	792	864	936	1008	1080	1152	1224	1296	1368	1440	1512	1584	1656	1728	1800
18½	444	518	592	666	740	814	888	962	1036	1110	1184	1258	1332	1406	1480	1554	1628	1702	1776	1850
19	456	532	608	684	760	836	912	988	1064	1140	1216	1292	1368	1444	1520	1596	1672	1748	1824	1900
19½	468	546	624	702	780	858	936	1014	1092	1170	1248	1326	1404	1482	1560	1638	1716	1794	1872	1950
20	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000
21	504	588	672	756	840	924	1008	1092	1176	1260	1344	1428	1512	1596	1680	1764	1848	1932	2016	2100
22	528	616	704	792	880	968	1056	1144	1232	1320	1408	1496	1584	1672	1760	1848	1936	2024	2112	2200
23	552	644	736	828	920	1012	1104	1196	1288	1380	1472	1564	1656	1748	1840	1932	2024	2116	2208	2300
24	576	672	768	864	960	1056	1152	1248	1344	1440	1536	1632	1728	1824	1920	2016	2112	2208	2304	2400
25	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
26	624	728	832	936	1040	1144	1248	1352	1456	1560	1664	1768	1872	1976	2080	2184	2288	2392	2496	2600
27	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	2700
28	672	784	896	1008	1120	1232	1344	1456	1568	1680	1792	1904	2016	2128	2240	2352	2464	2576	2688	2800
29	696	812	928	1044	1160	1276	1392	1508	1624	1740	1856	1972	2088	2204	2320	2436	2552	2668	2784	2900
30	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520	2640	2760	2880	3000
31	744	868	992	1116	1240	1364	1488	1612	1736	1860	1984	2108	2232	2356	2480	2604	2728	2852	2976	3100
32	768	896	1024	1152	1280	1408	1536	1664	1792	1920	2048	2176	2304	2432	2560	2688	2816	2944	3072	3200
33	792	924	1056	1188	1320	1452	1584	1716	1848	1980	2112	2244	2376	2508	2640	2772	2904	3036	3168	3300
34	816	952	1088	1224	1360	1496	1632	1768	1904	2040	2176	2312	2448	2584	2720	2856	2992	3128	3264	3400
35	840	980	1120	1260	1400	1540	1680	1820	1960	2100	2240	2380	2520	2660	2800	2940	3080	3220	3360	3500
36	864	1008	1152	1296	1440	1584	1728	1872	2016	2160	2304	2448	2592	2736	2880	3024	3168	3312	3456	3600
37	888	1036	1184	1332	1480	1628	1776	1924	2072	2220	2368	2516	2664	2812	2960	3108	3256	3404	3552	3700
38	912	1064	1216	1368	1520	1672	1824	1976	2128	2280	2432	2584	2736	2888	3040	3192	3344	3496	3648	3800
39	936	1092	1248	1404	1560	1716	1872	2028	2184	2340	2496	2652	2808	2964	3120	3276	3432	3588	3744	3900
40	960	1120	1280	1440	1600	1760	1920	2080	2240	2400	2560	2720	2880	3040	3200	3360	3520	3680	3840	4000
41	984	1148	1312	1476	1640	1804	1968	2132	2296	2460	2624	2788	2952	3116	3280	3444	3608	3772	3936	4100
42	1008	1176	1344	1512	1680	1848	2016	2184	2352	2520	2688	2856	3024	3192	3360	3528	3696	3864	4032	4200
43	1032	1204	1376	1548	1720	1892	2064	2236	2408	2580	2752	2924	3096	3268	3440	3612	3784	3956	4128	4300
44	1056	1232	1408	1584	1760	1936	2112	2288	2464	2640	2816	2992	3168	3344	3520	3696	3872	4048	4224	4400
45	1080	1260	1440	1620	1800	1980	2160	2340	2520	2700	2880	3060	3240	3420	3600	3780	3960	4140	4320	4500
46	1104	1288	1472	1656	1840	2024	2208	2392	2576	2760	2944	3128	3312	3496	3680	3864	4048	4232	4416	4600
47	1128	1316	1504	1692	1880	2068	2256	2444	2632	2820	3008	3196	3384	3572	3760	3948	4136	4324	4512	4700
48	1152	1344	1536	1728	1920	2112	2304	2496	2688	2880	3072	3264	3456	3648	3840	4032	4224	4416	4608	4800
49	1176	1372	1568	1764	1960	2156	2352	2548	2744	2940	3136	3332	3528	3724	3920	4116	4312	4508	4704	4900
50	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	1352																		
13½	1404	1458																	
14	1456	1512	1568																
14½	1508	1566	1624	1682															
15	1560	1620	1680	1740	1800														
15½	1612	1674	1736	1798	1860	1922													
16	1664	1728	1792	1856	1920	1984	2048												
16½	1716	1782	1848	1914	1980	2046	2112	2178											
17	1768	1836	1904	1972	2040	2108	2176	2244	2312										
17½	1820	1890	1960	2030	2100	2170	2240	2310	2380	2450									
18	1872	1944	2016	2088	2160	2232	2304	2376	2448	2520	2592								
18½	1924	1998	2072	2146	2220	2294	2368	2442	2516	2590	2664	2738							
19	1976	2052	2128	2204	2280	2356	2432	2508	2584	2660	2736	2812	2888						
19½	2028	2106	2184	2262	2340	2418	2496	2574	2652	2730	2808	2886	2964						
20	2080	2160	2240	2320	2400	2480	2560	2640	2720	2800	2880	2960	3040	3200					
21	2184	2268	2352	2436	2520	2604	2688	2772	2856	2940	3024	3108	3192	3360	3528				
22	2288	2376	2464	2552	2640	2728	2816	2904	2992	3080	3168	3256	3344	3520	3696	3872			
23	2392	2484	2576	2668	2760	2852	2944	3036	3128	3220	3312	3404	3496	3680	3864	4048	4232		
24	2496	2592	2688	2784	2880	2976	3072	3168	3264	3360	3456	3552	3648	3840	4032	4224	4416	4608	
25	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	4000	4200	4400	4600	4800	5000
26	2704	2808	2912	3016	3120	3224	3328	3432	3536	3640	3744	3848	3952	4160	4368	4576	4784	4992	5200
27	2808	2916	3024	3132	3240	3348	3456	3564	3672	3780	3888	3996	4104	4320	4536	4752	4968	5184	5400
28	2912	3024	3136	3248	3360	3472	3584	3696	3808	3920	4032	4144	4256	4480	4704	4928	5152	5376	5600
29	3016	3132	3248	3364	3480	3596	3712	3828	3944	4060	4176	4292	4408	4640	4872	5104	5336	5568	5800
30	3120	3240	3360	3480	3600	3720	3840	3960	4080	4200	4320	4440	4560	4800	5040	5280	5520	5760	6000
31	3224	3348	3472	3596	3720	3844	3968	4092	4216	4340	4464	4588	4712	4960	5208	5456	5704	5952	6200
32	3328	3456	3584	3712	3840	3968	4096	4224	4352	4480	4608	4736	4864	5120	5376	5632	5888	6144	6400
33	3432	3564	3696	3828	3960	4092	4224	4356	4488	4620	4752	4884	5016	5280	5544	5808	6072	6336	6600
34	3536	3672	3808	3944	4080	4216	4352	4488	4624	4760	4896	5032	5168	5440	5712	5984	6256	6528	6800
35	3640	3780	3920	4060	4200	4340	4480	4620	4760	4900	5040	5180	5320	5600	5880	6160	6440	6720	7000
36	3744	3888	4032	4176	4320	4464	4608	4752	4896	5040	5184	5328	5472	5760	6048	6336	6624	6912	7200
37	3848	3996	4144	4292	4440	4588	4736	4884	5032	5180	5328	5476	5624	5920	6216	6512	6808	7104	7400
38	3952	4104	4256	4408	4560	4712	4864	5016	5168	5320	5472	5624	5776	6080	6384	6688	6992	7296	7600
39	4056	4212	4368	4524	4680	4836	4992	5148	5304	5460	5616	5772	5928	6240	6552	6864	7176	7488	7800
40	4160	4320	4480	4640	4800	4960	5120	5280	5440	5600	5760	5920	6080	6400	6720	7040	7360	7680	8000
41	4264	4428	4592	4756	4920	5084	5248	5412	5576	5740	5904	6068	6232	6560	6888	7216	7544	7872	8200
42	4368	4536	4704	4872	5040	5208	5376	5544	5712	5880	6048	6216	6384	6720	7056	7392	7728	8064	8400
43	4472	4644	4816	4988	5160	5332	5504	5676	5848	6020	6192	6364	6536	6880	7224	7568	7912	8256	8600
44	4576	4752	4928	5104	5280	5456	5632	5808	5984	6160	6336	6512	6688	7040	7392	7744	8096	8448	8800
45	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6660	6840	7200	7560	7920	8280	8640	9000
46	4784	4968	5152	5336	5520	5704	5888	6072	6256	6440	6624	6808	6992	7360	7728	8096	8464	8832	9200
47	4888	5076	5264	5452	5640	5828	6016	6204	6392	6580	6768	6956	7144	7520	7896	8272	8648	9024	9400
48	4992	5184	5376	5568	5760	5952	6144	6336	6528	6720	6912	7104	7296	7680	8064	8448	8832	9216	9600
49	5096	5292	5488	5684	5880	6076	6272	6468	6664	6860	7056	7252	7448	7840	8232	8624	9016	9408	9800
50	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000	7200	7400	7600	8000	8400	8800	9200	9600	10000

	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2
3	77																			
3 1/2	89	104																		
4	102	119	136																	
4 1/2	115	134	153	172																
5	128	149	170	191	212															
5 1/2	140	164	187	210	234	257														
6	153	179	204	230	255	281	306													
6 1/2	166	193	221	249	276	304	332	359												
7	179	208	238	268	297	327	357	387	417											
7 1/2	191	223	255	287	319	351	383	414	446	478										
8	204	238	272	306	340	374	408	442	476	510	544									
8 1/2	217	253	289	325	361	397	434	470	506	542	578	614								
9	230	268	306	345	382	421	459	497	536	574	612	650	689							
9 1/2	242	283	323	363	404	444	485	525	565	606	646	686	727	767						
10	255	298	340	382	425	468	510	553	595	638	680	723	765	808	850					
10 1/2	268	312	357	402	446	491	536	580	625	669	714	759	803	848	893	937				
11	281	327	374	421	467	514	561	608	655	701	748	795	842	888	935	982	1029			
11 1/2	293	342	391	440	489	538	587	635	684	733	782	831	880	929	978	1026	1075	1124		
12	306	357	408	459	510	561	612	663	714	765	816	867	918	969	1020	1071	1122	1173	1224	
12 1/2	319	372	425	478	531	584	638	691	744	797	850	903	956	1009	1063	1116	1169	1222	1275	1328
13	332	387	442	497	552	608	663	718	774	829	884	939	995	1050	1105	1160	1216	1261	1326	1381
13 1/2	344	402	459	516	574	631	689	746	803	861	918	975	1033	1090	1148	1205	1262	1319	1377	1434
14	357	417	476	536	595	655	714	774	833	893	952	1012	1071	1131	1190	1250	1309	1369	1428	1488
14 1/2	370	431	493	555	616	678	740	801	863	924	986	1048	1109	1171	1233	1294	1356	1417	1479	1541
15	383	446	510	574	637	701	765	829	893	956	1020	1084	1148	1211	1275	1339	1403	1466	1530	1594
15 1/2	395	461	527	593	659	725	791	856	922	988	1054	1120	1186	1252	1318	1383	1449	1515	1581	1647
16	408	476	544	612	680	748	816	884	952	1020	1088	1156	1224	1292	1360	1428	1496	1564	1632	1700
16 1/2	421	491	561	631	701	771	842	912	982	1052	1122	1192	1262	1332	1403	1473	1543	1613	1683	1753
17	434	506	578	650	722	795	867	939	1012	1084	1156	1228	1301	1373	1445	1517	1590	1662	1734	1806
17 1/2	446	521	595	669	744	818	893	967	1041	1116	1190	1264	1339	1413	1488	1562	1636	1711	1785	1859
18	459	536	612	689	765	842	918	995	1071	1148	1224	1301	1377	1454	1530	1607	1683	1760	1836	1913
18 1/2	472	550	629	708	786	865	944	1022	1101	1179	1258	1337	1415	1494	1573	1651	1730	1808	1887	1966
19	485	565	646	727	807	888	969	1050	1131	1211	1292	1373	1454	1534	1615	1696	1777	1857	1938	2019
19 1/2	497	580	663	746	829	912	995	1077	1160	1243	1326	1409	1492	1575	1658	1740	1823	1906	1989	2072
20	510	595	680	765	850	935	1020	1105	1190	1275	1360	1445	1530	1615	1700	1785	1870	1955	2040	2125
21	536	625	714	803	893	982	1071	1160	1250	1339	1428	1517	1607	1696	1785	1874	1964	2053	2142	2231
22	561	655	748	842	935	1029	1122	1216	1309	1403	1496	1590	1683	1777	1870	1964	2037	2151	2244	2338
23	587	684	782	880	978	1075	1173	1271	1369	1466	1564	1662	1760	1857	1955	2053	2151	2248	2346	2444
24	612	714	816	918	1020	1122	1224	1326	1428	1530	1632	1734	1836	1938	2040	2142	2244	2346	2448	2550
25	638	744	850	956	1063	1169	1275	1381	1488	1594	1700	1806	1913	2019	2125	2231	2338	2444	2550	2656
26	663	774	884	995	1105	1216	1326	1437	1547	1658	1768	1879	1989	2100	2210	2321	2431	2542	2652	2763
27	689	803	918	1033	1148	1263	1377	1492	1607	1721	1836	1951	2066	2180	2295	2410	2525	2639	2754	2869
28	714	833	952	1071	1190	1309	1428	1547	1666	1785	1904	2023	2142	2261	2380	2499	2618	2737	2856	2975
29	740	863	986	1109	1233	1356	1479	1602	1726	1849	1972	2095	2219	2342	2465	2588	2712	2835	2958	3081
30	765	893	1020	1148	1275	1403	1530	1658	1785	1913	2040	2168	2295	2423	2550	2678	2805	2933	3060	3188
31	791	922	1054	1186	1318	1449	1581	1713	1845	1976	2108	2240	2372	2503	2635	2767	2899	3030	3162	3294
32	816	952	1088	1224	1360	1496	1632	1768	1904	2040	2176	2312	2448	2584	2720	2856	2992	3128	3264	3400
33	842	982	1122	1262	1403	1543	1683	1823	1964	2104	2244	2384	2525	2665	2805	2945	3086	3226	3366	3506
34	867	1012	1156	1301	1445	1590	1734	1879	2023	2168	2312	2457	2601	2746	2890	3035	3179	3324	3468	3613
35	893	1041	1190	1339	1488	1636	1785	1934	2083	2231	2380	2529	2678	2826	2975	3124	3273	3421	3570	3719
36	918	1071	1224	1377	1530	1683	1836	1989	2142	2295	2448	2601	2754	2907	3060	3213	3366	3519	3672	3825
37	944	1101	1258	1415	1573	1730	1887	2044	2202	2359	2516	2673	2831	2988	3145	3302	3460	3617	3774	3931
38	969	1131	1292	1454	1615	1777	1938	2100	2261	2423	2584	2746	2907	3069	3230	3392	3553	3715	3876	4038
39	995	1160	1326	1492	1658	1825	1989	2155	2321	2486	2652	2818	2984	3149	3315	3481	3647	3812	3978	4144
40	1020	1190	1360	1530	1700	1870	2040	2210	2380	2550	2720	2890	3060	3230	3400	3570	3740	3910	4080	4250
41	1046	1220	1394	1568	1743	1917	2091	2265	2440	2614	2788	2962	3137	3311	3485	3659	3834	4008	4182	4356
42	1071	1250	1428	1607	1785	1964	2142	2321	2500	2678	2856	3035	3213	3392	3570	3749	3927	4106	4284	4463
43	1097	1279	1462	1645	1828	2010	2193	2376	2559	2741	2924	3107	3290	3472	3655	3838	4021	4203	4386	4569
44	1122	1309	1496	1683	1870	2057	2244	2431	2618	2805	2992	3179	3366	3553	3740	3927	4114	4301	4488	4675
45	1148	1339	1530	1721	1913	2104	2295	2486	2678	2869	3060	3251	3443	3634	3825	4016	4208	4399	4590	4781
46	1173	1369	1564	1760	1955	2151	2346	2542	2737	2933	3128	3323	3519	3715	3910	4106	4301	4497	4692	4888
47	1199	1398	1598	1798	1998	2197	2397	2597	2797	2996	3196	3396	3596	3795	3995	4195	4395	4594	4794	4994
48	1224	1428	1632	1836	2040	2244	2448	2652	2856	3060	3264	3468	3672	3875	4080	4284	4488	4692	4896	5100
49	1250	1458	1666	1874	2083	2291	2499	2707	2916	3124	3332	3540	3749	3957	4165	4373	4582	4790	4998	5206
50	1275	1488	1700	1913	2125	2338	2550	2763	2975	3188	3400	3613	3825	4038	4250	4463	4675	4888	5100	5313

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	19½	20	21	22	23	24	25
13	1437																			
13½	1492	1549																		
14	1547	1607	1666																	
14½	1602	1664	1726	1787																
15	1658	1721	1785	1849	1913															
15½	1713	1779	1845	1910	1976	2042														
16	1768	1836	1904	1972	2040	2108	2176													
16½	1823	1893	1964	2034	2104	2174	2244	2314												
17	1879	1951	2023	2095	2168	2240	2312	2384	2457											
17½	1934	2008	2083	2157	2231	2306	2380	2454	2529	2601										
18	1989	2066	2142	2219	2295	2372	2448	2525	2601	2678	2754									
18½	2044	2123	2202	2280	2359	2437	2516	2596	2673	2752	2831	2909								
19	2100	2180	2261	2342	2423	2503	2584	2665	2746	2826	2907	2988	3069							
19½	2155	2237	2321	2403	2486	2569	2652	2735	2818	2901	2984	3066	3149							
20	2210	2295	2380	2465	2550	2635	2720	2805	2890	2975	3060	3145	3230	3315	3400					
21	2321	2410	2499	2588	2678	2767	2856	2945	3035	3124	3213	3302	3392	3481	3570	3749				
22	2431	2525	2618	2711	2805	2899	2992	3086	3179	3273	3366	3460	3553	3647	3740	3927	4114			
23	2542	2639	2737	2835	2933	3030	3128	3226	3324	3421	3519	3617	3715	3812	3910	4106	4301	4497		
24	2652	2754	2856	2958	3060	3162	3264	3366	3468	3570	3672	3774	3876	3978	4080	4284	4488	4692	4896	
25	2763	2869	2975	3081	3188	3294	3400	3506	3613	3719	3825	3931	4038	4144	4250	4463	4675	4888	5100	5313
26	2873	2984	3094	3205	3315	3426	3536	3647	3757	3868	3978	4089	4199	4310	4420	4641	4862	5083	5304	5525
27	2984	3098	3213	3328	3443	3557	3672	3787	3902	4016	4131	4246	4361	4475	4590	4820	5049	5279	5508	5738
28	3094	3213	3332	3451	3570	3689	3808	3927	4046	4165	4284	4403	4522	4641	4760	4998	5236	5474	5712	5950
29	3205	3323	3451	3574	3698	3821	3944	4067	4191	4314	4437	4560	4684	4807	4930	5177	5423	5670	5916	6163
30	3315	3443	3570	3698	3825	3953	4080	4208	4335	4463	4590	4718	4845	4973	5100	5355	5610	5865	6120	6375
31	3426	3557	3689	3821	3953	4084	4216	4348	4480	4611	4743	4875	5007	5138	5270	5534	5797	6061	6324	6588
32	3536	3672	3808	3944	4080	4216	4352	4488	4624	4760	4896	5032	5168	5304	5440	5712	5984	6256	6528	6800
33	3647	3787	3927	4067	4208	4348	4488	4628	4769	4909	5049	5189	5330	5470	5610	5891	6171	6452	6732	7013
34	3757	3902	4046	4191	4335	4480	4624	4769	4913	5058	5202	5347	5491	5636	5780	6069	6358	6647	6936	7225
35	3868	4016	4165	4314	4463	4611	4760	4909	5058	5206	5355	5504	5653	5801	5950	6248	6545	6843	7140	7438
36	3978	4131	4284	4437	4590	4743	4896	5049	5202	5355	5508	5661	5814	5967	6120	6426	6732	7038	7344	7650
37	4089	4246	4403	4560	4718	4875	5032	5189	5347	5504	5661	5818	5976	6133	6290	6605	6919	7234	7548	7863
38	4199	4361	4522	4684	4845	5007	5168	5330	5491	5653	5814	5976	6137	6299	6460	6783	7106	7429	7752	8075
39	4310	4475	4641	4807	4973	5138	5304	5470	5636	5801	5967	6133	6299	6464	6630	6962	7293	7625	7956	8288
40	4420	4590	4760	4930	5100	5270	5440	5610	5780	5950	6120	6290	6460	6630	6800	7140	7480	7820	8160	8500
41	4531	4705	4879	5053	5228	5402	5576	5750	5925	6099	6273	6447	6622	6796	6970	7319	7667	8016	8364	8713
42	4641	4820	4998	5177	5355	5534	5712	5891	6069	6248	6426	6605	6783	6962	7140	7497	7854	8211	8568	8925
43	4752	4934	5117	5300	5483	5665	5848	6031	6214	6396	6579	6762	6945	7127	7310	7676	8041	8407	8772	9138
44	4862	5049	5236	5423	5610	5797	5984	6171	6358	6545	6732	6919	7106	7293	7480	7854	8228	8602	8976	9350
45	4973	5164	5355	5546	5738	5929	6120	6311	6503	6694	6885	7076	7268	7459	7650	8033	8415	8798	9180	9563
46	5083	5279	5474	5670	5865	6061	6256	6452	6647	6843	7038	7234	7429	7625	7820	8211	8602	8993	9384	9775
47	5194	5393	5593	5793	5993	6192	6392	6592	6792	6991	7191	7391	7591	7790	7990	8390	8789	9189	9588	9988
48	5304	5508	5712	5916	6120	6324	6528	6732	6936	7140	7344	7548	7752	7956	8160	8568	8976	9384	9792	10200
49	5415	5623	5831	6039	6248	6456	6664	6872	7081	7289	7497	7705	7914	8122	8330	8747	9163	9580	9996	10413
50	5525	5738	5950	6163	6375	6588	6800	7013	7225	7438	7650	7863	8075	8288	8500	8925	9350	9775	10200	10625

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	81																			
3½	95	110																		
4	108	126	144																	
4½	122	142	162	182																
5	135	158	180	203	225															
5½	149	173	198	223	248	272														
6	162	189	216	243	270	297	324													
6½	176	205	234	263	293	322	351	380												
7	189	221	252	284	315	347	378	410	441											
7½	203	236	270	304	338	371	405	439	473	506										
8	216	252	288	324	360	396	432	468	504	540	576									
8½	230	268	306	344	383	421	459	497	536	574	612	650								
9	243	284	324	365	405	446	486	527	567	608	648	689	729							
9½	257	299	342	385	428	470	513	556	599	641	684	727	770	812						
10	270	315	360	405	450	495	540	585	630	675	720	765	810	855	900					
10½	284	331	378	425	473	520	567	614	662	709	756	803	851	898	945	992				
11	297	347	396	446	495	544	594	644	693	743	792	842	891	940	990	1040	1089			
11½	311	362	414	466	518	569	621	673	725	776	828	880	932	983	1035	1087	1139	1190		
12	324	378	432	486	540	594	648	702	756	810	864	918	972	1026	1080	1134	1188	1242	1296	
12½	338	394	450	506	563	619	675	731	788	844	900	956	1013	1069	1125	1181	1238	1294	1350	1406
13	351	410	468	527	585	644	702	761	819	878	936	995	1053	1111	1170	1229	1287	1346	1404	1463
13½	365	425	486	547	608	668	729	790	851	911	972	1033	1094	1154	1215	1276	1337	1397	1458	1519
14	378	441	504	567	630	693	756	819	882	945	1008	1071	1134	1197	1260	1323	1386	1449	1512	1575
14½	392	457	522	587	653	718	783	848	914	979	1044	1109	1175	1240	1305	1370	1436	1501	1566	1631
15	405	473	540	608	675	743	810	878	945	1013	1080	1148	1215	1282	1350	1418	1485	1553	1620	1688
15½	419	488	558	628	698	767	837	907	977	1046	1116	1186	1256	1325	1395	1465	1535	1604	1674	1744
16	432	504	576	648	720	792	864	936	1008	1080	1152	1224	1296	1368	1440	1512	1584	1656	1728	1800
16½	446	520	594	668	743	817	891	965	1040	1114	1188	1262	1337	1411	1485	1559	1634	1708	1782	1856
17	459	536	612	689	765	842	918	995	1071	1148	1224	1301	1377	1453	1530	1607	1683	1760	1836	1913
17½	473	551	630	709	788	866	945	1024	1103	1181	1260	1339	1418	1496	1575	1654	1733	1811	1890	1969
18	486	567	648	729	810	891	972	1053	1134	1215	1296	1377	1458	1539	1620	1701	1782	1863	1944	2025
18½	500	583	666	749	833	916	999	1082	1166	1249	1332	1415	1499	1582	1665	1748	1832	1915	1998	2081
19	513	599	684	770	855	941	1026	1112	1197	1283	1368	1454	1539	1625	1710	1796	1881	1967	2052	2138
19½	527	614	702	790	878	965	1053	1141	1229	1316	1404	1492	1580	1667	1755	1843	1931	2018	2106	2194
20	540	630	720	810	900	990	1080	1170	1260	1350	1440	1530	1620	1710	1800	1890	1980	2070	2160	2250
21	567	662	756	851	945	1040	1134	1229	1323	1418	1512	1607	1701	1796	1890	1985	2079	2174	2268	2363
22	594	693	792	891	990	1089	1188	1287	1386	1485	1584	1683	1782	1881	1980	2079	2178	2277	2376	2475
23	621	725	828	932	1035	1139	1242	1346	1449	1553	1656	1760	1863	1967	2070	2174	2277	2381	2484	2588
24	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	2700
25	675	788	900	1013	1125	1238	1350	1463	1575	1688	1800	1913	2025	2138	2250	2363	2475	2588	2700	2813
26	702	819	936	1053	1170	1287	1404	1521	1638	1755	1872	1989	2106	2223	2340	2457	2574	2691	2808	2925
27	729	851	972	1094	1215	1337	1458	1580	1701	1823	1944	2066	2187	2309	2430	2552	2673	2795	2916	3038
28	756	882	1008	1134	1260	1386	1512	1638	1764	1890	2016	2142	2268	2394	2520	2646	2772	2898	3024	3150
29	783	914	1044	1175	1305	1436	1566	1697	1827	1958	2088	2219	2349	2480	2610	2741	2871	3002	3132	3263
30	810	945	1080	1215	1350	1485	1620	1755	1890	2025	2160	2295	2430	2565	2700	2835	2970	3105	3240	3375
31	837	977	1116	1256	1395	1535	1674	1814	1953	2093	2232	2372	2511	2651	2790	2930	3069	3209	3348	3488
32	864	1008	1152	1296	1440	1584	1728	1872	2016	2160	2304	2448	2593	2736	2880	3024	3168	3312	3456	3600
33	891	1040	1188	1337	1485	1634	1782	1931	2079	2228	2376	2525	2673	2822	2970	3119	3267	3416	3564	3713
34	918	1071	1224	1377	1530	1683	1836	1989	2142	2295	2448	2601	2754	2907	3060	3213	3366	3519	3672	3825
35	945	1103	1260	1418	1575	1733	1890	2048	2205	2363	2520	2678	2835	2993	3150	3308	3465	3623	3780	3938
36	972	1134	1296	1458	1620	1782	1944	2106	2268	2430	2592	2754	2916	3078	3240	3402	3564	3726	3888	4050
37	999	1166	1332	1499	1665	1832	1998	2165	2331	2498	2664	2831	2997	3164	3330	3497	3663	3830	3996	4163
38	1026	1197	1368	1539	1710	1881	2052	2223	2394	2565	2736	2907	3078	3249	3420	3591	3762	3933	4104	4275
39	1053	1229	1404	1580	1755	1931	2106	2282	2457	2633	2808	2984	3159	3335	3510	3686	3861	4037	4212	4388
40	1080	1260	1440	1620	1800	1980	2160	2340	2520	2700	2880	3060	3240	3420	3600	3780	3960	4140	4320	4500
41	1107	1292	1476	1661	1845	2030	2214	2399	2583	2768	2952	3137	3321	3506	3690	3875	4059	4244	4428	4613
42	1134	1323	1512	1701	1890	2079	2268	2457	2646	2835	3024	3213	3402	3591	3780	3969	4158	4347	4536	4725
43	1161	1355	1548	1742	1935	2129	2322	2516	2709	2903	3096	3290	3483	3677	3870	4064	4257	4451	4644	4838
44	1188	1386	1584	1782	1980	2178	2376	2574	2772	2970	3168	3366	3564	3762	3960	4158	4356	4554	4752	4950
45	1215	1418	1620	1823	2025	2228	2430	2633	2835	3038	3240	3443	3645	3848	4050	4253	4455	4658	4860	5063
46	1242	1446	1656	1863	2070	2277	2484	2691	2898	3105	3312	3519	3726	3933	4140	4347	4554	4761	4968	5175
47	1269	1481	1692	1904	2115	2327	2538	2750	2961	3173	3384	3596	3807	4019	4230	4442	4653	4865	5076	5288
48	1296	1512	1728	1944	2160	2376	2592	2808	3024	3240	3456	3672	3888	4104	4320	4536	4752	4968	5184	5400
49	1323	1544	1764	1985	2205	2426	2646	2867	3087	3308	3528	3749	3969	4190	4411	4631	4851	5072	5292	5513
50	1350	1575	1800	2025	2250	2475	2700	2925	3150	3375	3600	3825	4050	4275	4500	4725	4950	5175	5400	5625

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	1521																		
13½	1580	1640																	
14	1638	1701	1764																
14½	1697	1762	1827	1892															
15	1755	1823	1890	1958	2025														
15½	1814	1883	1953	2023	2093	2162													
16	1872	1944	2016	2088	2160	2232	2304												
16½	1931	2005	2079	2153	2228	2302	2376	2450											
17	1989	2066	2142	2219	2295	2372	2448	2525	2601										
17½	2048	2126	2205	2284	2363	2441	2520	2599	2678	2756									
18	2106	2187	2268	2349	2430	2511	2592	2673	2754	2835	2916								
18½	2165	2248	2331	2414	2498	2581	2664	2747	2831	2914	2997	3080							
19	2223	2309	2394	2480	2565	2651	2736	2822	2907	2993	3078	3164	3249						
19½	2282	2369	2457	2545	2633	2720	2808	2896	2984	3071	3159	3247	3335						
20	2340	2430	2520	2610	2700	2790	2880	2970	3060	3150	3240	3330	3420	3600					
21	2457	2552	2646	2741	2835	2930	3024	3119	3213	3308	3402	3497	3591	3780	3969				
22	2574	2673	2772	2871	2970	3069	3168	3267	3366	3465	3564	3663	3762	3960	4158	4356			
23	2691	2795	2898	3002	3105	3209	3312	3416	3519	3623	3726	3830	3933	4140	4347	4554	4761		
24	2808	2916	3024	3132	3240	3348	3456	3564	3672	3780	3888	3996	4104	4320	4536	4752	4968	5184	
25	2925	3038	3150	3263	3375	3488	3600	3713	3825	3938	4050	4163	4275	4500	4725	4950	5175	5400	5625
26	3042	3159	3276	3393	3510	3627	3744	3861	3978	4095	4212	4329	4446	4680	4914	5148	5382	5616	5850
27	3159	3281	3402	3524	3645	3767	3888	4010	4131	4253	4374	4496	4617	4860	5103	5346	5589	5832	6075
28	3276	3402	3528	3654	3780	3906	4032	4158	4284	4410	4536	4662	4788	5040	5292	5544	5796	6048	6300
29	3393	3524	3654	3785	3915	4046	4176	4307	4437	4568	4698	4829	4959	5220	5481	5742	6003	6264	6525
30	3510	3645	3780	3915	4050	4185	4320	4455	4590	4725	4860	4995	5130	5400	5670	5940	6210	6480	6750
31	3627	3767	3906	4046	4185	4325	4464	4604	4743	4883	5022	5162	5301	5580	5859	6138	6417	6696	6975
32	3744	3888	4032	4176	4320	4464	4608	4752	4896	5040	5184	5328	5472	5760	6048	6336	6624	6912	7200
33	3861	4010	4158	4307	4455	4604	4752	4901	5049	5198	5346	5495	5643	5940	6237	6534	6831	7128	7425
34	3978	4131	4284	4437	4590	4743	4896	5049	5202	5355	5508	5661	5814	6120	6426	6732	7038	7344	7650
35	4095	4253	4410	4568	4725	4883	5040	5198	5355	5513	5670	5828	5985	6300	6615	6930	7245	7560	7875
36	4212	4374	4536	4698	4860	5022	5184	5346	5508	5670	5832	5994	6156	6480	6804	7128	7452	7776	8100
37	4329	4496	4662	4829	4995	5162	5328	5495	5661	5828	5994	6161	6327	6660	6993	7326	7659	7992	8325
38	4446	4617	4788	4959	5130	5301	5472	5643	5814	5985	6156	6327	6498	6840	7182	7524	7866	8208	8550
39	4563	4739	4914	5090	5265	5441	5616	5792	5967	6143	6318	6494	6669	7020	7371	7722	8073	8424	8775
40	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6660	6840	7200	7560	7920	8280	8640	9000
41	4797	4982	5166	5351	5535	5720	5904	6089	6273	6458	6642	6827	7011	7380	7749	8118	8487	8856	9225
42	4914	5103	5292	5481	5670	5859	6048	6237	6426	6615	6804	6993	7182	7560	7938	8316	8694	9072	9450
43	5031	5225	5418	5612	5805	5999	6192	6386	6579	6773	6966	7160	7353	7740	8127	8514	8901	9288	9675
44	5148	5346	5544	5742	5940	6138	6336	6534	6732	6930	7128	7326	7524	7920	8316	8712	9108	9504	9900
45	5265	5468	5670	5873	6075	6278	6480	6683	6885	7088	7290	7493	7695	8100	8505	8910	9315	9720	10125
46	5382	5589	5796	6003	6210	6417	6624	6831	7038	7245	7452	7659	7866	8280	8694	9108	9522	9936	10350
47	5499	5711	5922	6134	6345	6557	6768	6980	7191	7403	7614	7826	8037	8460	8883	9306	9729	10152	10575
48	5616	5832	6048	6264	6480	6696	6912	7128	7344	7560	7776	7992	8208	8640	9072	9504	9936	10368	10800
49	5733	5954	6174	6395	6615	6836	7056	7277	7497	7718	7938	8159	8379	8820	9261	9702	10143	10584	11025
50	5850	6075	6300	6525	6750	6975	7200	7425	7650	7875	8100	8325	8550	9000	9450	9900	10350	10800	11250

91-2 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	85																			
3½	99	116																		
4	114	133	152																	
4½	128	149	171	192																
5	142	166	190	213	237															
5½	156	182	209	235	261	287														
6	171	199	228	256	285	313	342													
6½	182	216	247	277	308	339	370	401												
7	199	232	266	299	332	365	399	432	465											
7½	213	249	285	320	358	391	427	463	498	534										
8	228	266	304	342	380	418	456	494	532	570	608									
8½	242	282	323	363	403	444	484	524	565	605	646	686								
9	256	299	342	384	427	470	513	555	598	641	684	726	769							
9½	270	315	361	406	451	496	541	586	631	676	722	767	812	857						
10	287	332	380	427	475	522	570	617	665	712	761	807	855	902	950					
10½	299	349	399	448	498	548	598	648	698	748	798	847	897	947	997	1047				
11	313	365	418	470	522	574	627	679	731	783	836	888	940	992	1045	1097	1149			
11½	327	382	437	491	547	600	655	710	764	819	874	928	982	1030	1092	1147	1201	1256		
12	342	399	456	513	570	627	684	741	798	855	912	969	1026	1083	1140	1197	1254	1311	1368	
12½	356	415	475	534	593	653	712	771	831	890	950	1009	1068	1128	1187	1246	1306	1365	1425	1484
13	370	432	494	555	617	679	741	802	864	926	988	1049	1111	1173	1235	1296	1358	1420	1482	1543
13½	384	448	513	577	641	705	769	833	897	961	1026	1090	1154	1218	1282	1346	1410	1474	1539	1603
14	399	465	532	598	665	731	798	864	931	997	1064	1130	1197	1263	1330	1396	1463	1529	1596	1663
14½	413	482	551	619	688	757	826	895	964	1033	1102	1170	1239	1308	1377	1446	1515	1584	1653	1721
15	427	498	570	641	712	783	855	926	997	1068	1140	1211	1282	1353	1425	1496	1567	1638	1710	1781
15½	441	515	589	662	736	807	883	957	1030	1104	1178	1251	1325	1398	1472	1546	1619	1693	1767	1840
16	456	532	608	684	760	836	912	988	1064	1140	1216	1292	1368	1444	1520	1596	1672	1748	1824	1900
16½	470	548	627	705	783	862	940	1018	1097	1175	1254	1332	1410	1489	1567	1645	1724	1802	1881	1959
17	484	565	646	726	807	888	969	1049	1130	1211	1292	1372	1453	1534	1615	1695	1776	1857	1938	2018
17½	498	581	665	748	831	914	997	1081	1163	1246	1330	1413	1496	1579	1662	1745	1828	1911	1995	2078
18	513	598	684	769	855	940	1026	1111	1197	1282	1368	1453	1539	1624	1710	1795	1881	1966	2052	2137
18½	527	615	703	790	878	966	1054	1142	1230	1318	1406	1493	1581	1669	1757	1845	1933	2021	2109	2196
19	541	631	722	812	902	994	1083	1173	1263	1353	1444	1534	1624	1714	1805	1895	1986	2075	2166	2256
19½	555	648	741	833	926	1018	1111	1204	1297	1389	1482	1574	1667	1759	1852	1945	2037	2130	2223	2315
20	570	665	760	855	950	1045	1140	1235	1330	1425	1520	1615	1710	1805	1900	1995	2090	2185	2280	2375
21	598	698	798	897	997	1097	1197	1296	1396	1496	1596	1695	1795	1895	1995	2094	2194	2295	2394	2493
22	627	731	836	940	1045	1149	1254	1358	1463	1567	1672	1776	1881	1985	2090	2194	2299	2403	2507	2612
23	655	764	874	983	1092	1201	1311	1420	1529	1638	1748	1857	1967	2075	2185	2294	2403	2512	2622	2731
24	684	798	912	1026	1140	1254	1368	1482	1596	1710	1824	1938	2052	2166	2280	2394	2508	2622	2736	2850
25	712	831	950	1069	1187	1306	1425	1543	1662	1781	1900	2018	2137	2256	2375	2493	2612	2731	2850	2968
26	741	864	988	1111	1235	1358	1482	1606	1729	1853	1976	2099	2223	2346	2470	2593	2717	2840	2964	3087
27	769	897	1026	1154	1282	1410	1539	1667	1795	1923	2052	2180	2308	2436	2565	2693	2821	2949	3078	3206
28	798	931	1064	1197	1330	1463	1596	1729	1862	1995	2128	2261	2394	2527	2660	2793	2926	3059	3192	3325
29	826	964	1102	1239	1377	1515	1653	1790	1928	2066	2204	2341	2479	2617	2755	2892	3030	3168	3306	3443
30	855	997	1140	1282	1425	1567	1710	1852	1995	2137	2280	2422	2565	2707	2850	2992	3135	3277	3420	3562
31	883	1030	1178	1325	1472	1619	1767	1914	2061	2208	2356	2502	2650	2797	2945	3092	3239	3386	3535	3681
32	912	1064	1216	1368	1520	1672	1824	1976	2128	2280	2432	2584	2736	2888	3040	3192	3344	3496	3648	3800
33	940	1097	1254	1410	1567	1724	1881	2037	2194	2351	2508	2664	2821	2978	3135	3291	3448	3605	3762	3918
34	969	1130	1292	1456	1615	1776	1938	2099	2261	2422	2584	2745	2907	3068	3230	3391	3553	3714	3876	4037
35	997	1163	1330	1496	1662	1828	1995	2161	2327	2493	2660	2826	2992	3158	3325	3491	3657	3823	3990	4156
36	1026	1197	1368	1539	1710	1881	2052	2223	2394	2565	2736	2907	3078	3249	3420	3591	3762	3933	4104	4270
37	1054	1230	1406	1581	1757	1933	2109	2284	2460	2636	2812	2987	3163	3339	3515	3690	3866	4042	4218	4393
38	1083	1263	1441	1624	1805	1985	2166	2346	2527	2707	2888	3068	3249	3429	3610	3790	3971	4151	4332	4512
39	1111	1296	1482	1667	1852	2037	2223	2408	2593	2778	2964	3149	3334	3519	3705	3890	4075	4260	4446	4631
40	1140	1330	1520	1710	1900	2090	2280	2470	2660	2850	3040	3230	3420	3610	3800	3990	4180	4370	4560	4750
41	1168	1363	1558	1752	1947	2142	2337	2531	2726	2921	3116	3310	3505	3700	3895	4089	4284	4479	4674	4868
42	1197	1396	1596	1795	1995	2194	2394	2593	2793	2992	3192	3391	3591	3790	3990	4189	4389	4588	4788	4987
43	1225	1429	1634	1838	2042	2246	2451	2655	2859	3063	3268	3472	3676	3880	4085	4289	4493	4697	4902	5106
44	1254	1463	1672	1881	2090	2299	2508	2717	2926	3135	3344	3553	3762	3971	4180	4389	4598	4807	5016	5225
45	1282	1496	1710	1923	2137	2351	2565	2778	2992	3206	3420	3633	3847	4061	4275	4488	4702	4916	5130	5343
46	1311	1529	1748	1966	2185	2403	2622	2840	3059	3277	3496	3714	3933	4151	4370	4588	4807	5025	5244	5462
47	1339	1562	1786	2009	2232	2455	2679	2902	3125	3348	3571	3795	4018	4241	4465	4688	4911	5134	5358	5581
48	1368	1596	1824	2052	2280	2508	2736	2964	3192	3420	3648	3876	4104	4332	4560	4788	5016	5244	5472	5700
49	1396	1629	1862	2094	2327	2560	2793	3025	3258	3491	3724	3956	4189	4422	4655	4887	5120	5353	5586	5818
50	1425	1662	1900	2137	2375	2612	2850	3087	3325	3562	3800	4037	4275	4512	4750	4987	5225	5462	5700	5937

ALWAYS USE SMALLEST NUMBER AT TOP AND LARGEST AT SIDE.

SMALLER HAVING CEILINGS 9 1-2 FT. HIGH.

9 1-2

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	1605																		
13½	1667	1731																	
14	1729	1795	1862																
14½	1790	1859	1928	1997															
15	1852	1923	1995	2066	2137														
15½	1914	1997	2061	2135	2208	2282													
16	1976	2052	2128	2204	2280	2356	2432												
16½	2037	2116	2194	2272	2351	2429	2508	2586											
17	2099	2180	2261	2341	2422	2503	2584	2664	2745										
17½	2161	2244	2327	2410	2493	2576	2660	2743	2826	2909									
18	2223	2318	2394	2479	2565	2650	2736	2821	2907	2992	3078								
18½	2284	2372	2460	2548	2636	2724	2812	2899	2987	3075	3163	3251							
19	2346	2436	2527	2617	2707	2797	2888	2978	3068	3158	3249	3339	3429						
19½	2408	2500	2593	2686	2778	2871	2964	3056	3149	3241	3334	3427	3519						
20	2470	2565	2660	2755	2850	2945	3040	3135	3230	3325	3420	3515	3610	3800					
21	2593	2693	2793	2892	2992	3092	3192	3291	3391	3491	3591	3690	3790	3990	4189				
22	2717	2821	2926	3030	3135	3239	3344	3448	3553	3657	3762	3866	3971	4180	4389	4598			
23	2840	2949	3059	3168	3277	3386	3496	3605	3714	3823	3933	4042	4151	4370	4588	4807	5025		
24	2964	3078	3192	3306	3420	3534	3648	3762	3876	3990	4104	4218	4332	4560	4788	5016	5244	5472	
25	3087	3206	3325	3443	3562	3681	3800	3918	4037	4156	4275	4393	4512	4750	4987	5225	5462	5700	5937
26	3211	3334	3458	3581	3705	3828	3952	4075	4199	4322	4446	4569	4693	4940	5187	5434	5681	5928	6175
27	3334	3462	3591	3719	3847	3975	4104	4232	4360	4488	4617	4745	4873	5130	5386	5643	5899	6156	6412
28	3458	3591	3724	3857	3990	4123	4256	4389	4522	4655	4788	4921	5054	5320	5586	5852	6118	6384	6650
29	3581	3719	3857	3994	4132	4270	4408	4645	4683	4821	4959	5096	5234	5510	5785	6061	6336	6612	6887
30	3705	3847	3990	4132	4275	4417	4560	4702	4845	4987	5130	5272	5415	5700	5985	6270	6555	6840	7125
31	3828	3975	4123	4270	4417	4564	4712	4859	5006	5153	5301	5448	5595	5890	6184	6479	6773	7068	7362
32	3952	4104	4256	4408	4560	4712	4864	5016	5168	5320	5472	5624	5776	6080	6384	6688	6992	7296	7600
33	4075	4232	4389	4545	4702	4859	5015	5172	5329	5486	5643	5799	5956	6270	6583	6897	7210	7524	7837
34	4199	4360	4522	4683	4845	5006	5168	5329	5491	5652	5814	5975	6137	6460	6783	7106	7429	7752	8075
35	4322	4488	4655	4821	4987	5153	5320	5486	5652	5818	5985	6151	6317	6650	6982	7315	7647	7980	8312
36	4446	4617	4788	4959	5130	5301	5472	5642	5814	5985	6156	6327	6498	6840	7182	7524	7866	8208	8550
37	4569	4745	4921	5096	5272	5448	5624	5799	5975	6151	6327	6502	6678	7030	7381	7733	8084	8436	8787
38	4693	4873	5054	5234	5415	5595	5776	5956	6137	6317	6498	6678	6859	7220	7581	7942	8303	8664	9025
39	4816	5001	5187	5372	5557	5742	5928	6113	6298	6483	6669	6854	7039	7410	7780	8151	8521	8892	9262
40	4940	5130	5320	5510	5700	5890	6080	6270	6460	6650	6840	7030	7220	7600	7980	8360	8740	9120	9500
41	5063	5258	5453	5647	5842	6037	6232	6426	6621	6816	7011	7205	7400	7790	8179	8569	8958	9348	9737
42	5187	5386	5586	5785	5985	6184	6384	6583	6783	6982	7182	7381	7581	7980	8379	8778	9177	9576	9975
43	5310	5514	5719	5923	6127	6331	6536	6740	6944	7148	7353	7557	7761	8170	8578	8987	9395	9804	10212
44	5434	5643	5852	6061	6270	6479	6688	6897	7106	7315	7524	7733	7943	8360	8778	9196	9614	10032	10450
45	5557	5771	5985	6198	6412	6626	6840	7053	7267	7481	7695	7908	8122	8550	8977	9405	9832	10260	10687
46	5681	5899	6118	6336	6555	6773	6992	7210	7429	7647	7866	8084	8303	8740	9177	9614	10051	10488	10925
47	5804	6027	6251	6474	6697	6920	7144	7367	7590	7813	8037	8260	8483	9300	9376	9823	10269	10716	11162
48	5928	6156	6384	6612	6840	7068	7296	7524	7752	7980	8208	8436	8664	9120	9576	10032	10488	10944	11400
49	6051	6284	6517	6749	6982	7215	7448	7680	7913	8146	8379	8611	8844	9310	9775	10241	10706	11172	11637
50	6175	6412	6650	6887	7125	7362	7600	7837	8075	8312	8550	8787	9025	9500	9975	10450	10925	11400	11875

WHEN THE EXACT SIZE IS NOT GIVEN USE THE NEXT LARGER.

10 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	90																			
3½	105	123																		
4	120	140	160																	
4½	135	158	180	203																
5	150	175	200	225	250															
5½	165	193	220	248	275	303														
6	180	210	240	270	300	330	360													
6½	195	228	260	293	325	358	390	423												
7	210	245	280	315	350	385	420	455	490											
7½	225	263	300	338	375	413	450	488	525	563										
8	240	280	320	360	400	440	480	520	560	600	640									
8½	255	298	340	383	425	468	510	553	595	638	680	723								
9	270	315	360	405	450	495	540	585	630	675	720	765	810							
9½	285	333	380	428	475	523	570	618	665	713	760	808	855	903						
10	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000					
10½	315	368	420	473	525	578	630	683	735	788	840	893	945	998	1050	1103				
11	330	385	440	495	550	605	660	715	770	825	880	935	990	1045	1100	1155	1210			
11½	345	403	460	518	575	633	690	748	805	863	920	978	1035	1093	1150	1208	1265	1323		
12	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	
12½	375	438	500	563	625	688	750	813	875	938	1000	1063	1125	1188	1250	1313	1375	1438	1500	1563
13	390	455	520	585	650	715	780	845	910	975	1040	1105	1170	1235	1300	1365	1430	1495	1560	1625
13½	405	473	540	608	675	743	810	878	945	1013	1080	1148	1215	1283	1350	1418	1485	1553	1620	1688
14	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1330	1400	1470	1540	1610	1680	1750
14½	435	508	580	653	725	798	870	943	1015	1088	1160	1233	1305	1378	1450	1523	1595	1668	1740	1813
15	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	1575	1650	1725	1800	1875
15½	465	543	620	698	775	853	930	1008	1085	1163	1240	1318	1395	1473	1550	1628	1705	1783	1860	1938
16	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000
16½	495	578	660	743	825	908	990	1073	1155	1238	1320	1403	1485	1568	1650	1733	1815	1898	1980	2063
17	510	595	680	765	850	935	1020	1105	1190	1275	1360	1445	1530	1615	1700	1785	1870	1955	2040	2125
17½	525	613	700	788	875	963	1050	1138	1225	1313	1400	1488	1575	1663	1750	1838	1925	2013	2100	2188
18	540	630	720	810	900	990	1080	1170	1260	1350	1440	1530	1620	1710	1800	1890	1980	2070	2160	2250
18½	555	648	740	833	925	1018	1110	1203	1295	1388	1480	1573	1665	1758	1850	1943	2035	2128	2220	2313
19	570	665	760	855	950	1045	1140	1235	1330	1425	1520	1615	1710	1805	1900	1995	2090	2185	2280	2375
19½	585	683	780	878	975	1073	1170	1268	1365	1463	1560	1658	1755	1853	1950	2048	2145	2243	2340	2438
20	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
21	630	735	840	945	1050	1155	1260	1365	1470	1575	1680	1785	1890	1995	2100	2205	2310	2415	2520	2625
22	660	770	880	990	1100	1210	1320	1430	1540	1650	1760	1870	1980	2090	2200	2310	2420	2530	2640	2750
23	690	805	920	1035	1150	1265	1380	1495	1610	1725	1840	1955	2070	2185	2300	2415	2530	2645	2760	2875
24	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520	2640	2760	2880	3000
25	750	875	1000	1125	1250	1375	1500	1625	1750	1875	2000	2125	2250	2375	2500	2625	2750	2875	3000	3125
26	780	910	1040	1170	1300	1430	1560	1690	1820	1950	2080	2210	2340	2470	2600	2730	2860	2990	3120	3250
27	810	945	1080	1215	1350	1485	1620	1755	1890	2025	2160	2295	2430	2565	2700	2835	2970	3105	3240	3375
28	840	980	1120	1260	1400	1540	1680	1820	1960	2100	2240	2380	2520	2660	2800	2940	3080	3220	3360	3500
29	870	1015	1160	1305	1450	1595	1740	1885	2030	2175	2320	2465	2610	2755	2900	3045	3190	3335	3480	3625
30	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3150	3300	3450	3600	3750
31	930	1085	1240	1395	1550	1705	1860	2015	2170	2325	2480	2635	2790	2945	3100	3255	3410	3565	3720	3875
32	960	1120	1280	1440	1600	1760	1920	2080	2240	2400	2560	2720	2880	3040	3200	3360	3520	3680	3840	4000
33	990	1155	1320	1485	1650	1815	1980	2145	2310	2475	2640	2805	2970	3135	3300	3465	3630	3795	3960	4125
34	1020	1190	1360	1530	1700	1870	2040	2210	2380	2550	2720	2890	3060	3230	3400	3570	3740	3910	4080	4250
35	1050	1225	1400	1575	1750	1925	2100	2275	2450	2625	2800	2975	3150	3325	3500	3675	3850	4025	4200	4375
36	1080	1260	1440	1620	1800	1980	2160	2340	2520	2700	2880	3060	3240	3420	3600	3780	3960	4140	4320	4500
37	1110	1295	1480	1665	1850	2035	2220	2405	2590	2775	2960	3145	3330	3515	3700	3885	4070	4255	4440	4625
38	1140	1330	1520	1710	1900	2090	2280	2470	2660	2850	3040	3230	3420	3610	3800	3990	4180	4370	4560	4750
39	1170	1365	1560	1755	1950	2145	2340	2535	2730	2925	3120	3315	3510	3705	3900	4095	4290	4485	4680	4875
40	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
41	1230	1435	1640	1845	2050	2255	2460	2665	2870	3075	3280	3485	3690	3895	4100	4305	4510	4715	4920	5125
42	1260	1470	1680	1890	2100	2310	2520	2730	2940	3150	3360	3570	3780	3990	4200	4410	4620	4830	5040	5250
43	1290	1505	1720	1935	2150	2365	2580	2795	3010	3225	3440	3655	3870	4085	4300	4515	4730	4945	5160	5375
44	1320	1540	1760	1980	2200	2420	2640	2860	3080	3300	3520	3740	3960	4180	4400	4620	4840	5060	5280	5500
45	1350	1575	1800	2025	2250	2475	2700	2925	3150	3375	3600	3825	4050	4275	4500	4725	4950	5175	5400	5625
46	1380	1610	1840	2070	2300	2530	2760	2990	3220	3450	3680	3910	4140	4370	4600	4830	5060	5290	5520	5750
47	1410	1645	1880	2115	2350	2585	2820	3055	3290	3525	3760	3995	4230	4465	4700	4935	5170	5405	5640	5875
48	1440	1680	1920	2160	2400	2640	2880	3120	3360	3600	3840	4080	4320	4560	4800	5040	5280	5520	5760	6000
49	1470	1715	1960	2205	2450	2695	2940	3185	3430	3675	3920	4165	4410	4655	4900	5145	5390	5635	5880	6125
50	1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	1690																		
13½	1755	1823																	
14	1820	1890	1960																
14½	1885	1958	2030	2103															
15	1950	2025	2100	2175	2250														
15½	2015	2093	2170	2248	2325	2403													
16	2080	2160	2240	2320	2400	2480	2560												
16½	2145	2228	2310	2393	2475	2558	2640	2723											
17	2210	2295	2380	2465	2550	2635	2720	2805	2890										
17½	2275	2363	2450	2538	2625	2713	2800	2888	2975	3063									
18	2340	2430	2520	2610	2700	2790	2880	2970	3060	3150	3240								
18½	2405	2498	2590	2683	2775	2868	2960	3053	3145	3238	3330	3423							
19	2470	2565	2660	2755	2850	2945	3040	3135	3230	3325	3420	3515	3610						
19½	2535	2633	2730	2828	2925	3023	3120	3218	3315	3413	3510	3608	3705						
20	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	4000					
21	2730	2835	2940	3045	3150	3255	3360	3465	3570	3675	3780	3885	3990	4200	4410				
22	2860	2970	3080	3190	3300	3410	3520	3630	3740	3850	3960	4070	4180	4400	4620	4840			
23	2990	3105	3220	3335	3450	3565	3680	3795	3910	4025	4140	4255	4370	4600	4830	5060	5290		
24	3120	3240	3360	3480	3600	3720	3840	3960	4080	4200	4320	4440	4560	4800	5040	5280	5520	5760	
25	3250	3375	3500	3625	3750	3875	4000	4125	4250	4375	4500	4625	4750	5000	5250	5500	5750	6000	6250
26	3380	3510	3640	3770	3900	4030	4160	4290	4420	4550	4680	4810	4940	5200	5460	5720	5980	6240	6500
27	3510	3645	3780	3915	4050	4185	4320	4455	4590	4725	4860	4995	5130	5400	5670	5940	6210	6480	6750
28	3640	3780	3920	4060	4200	4340	4480	4620	4760	4900	5040	5180	5320	5600	5880	6160	6440	6720	7000
29	3770	3915	4060	4205	4350	4495	4640	4785	4930	5075	5220	5365	5510	5800	6090	6380	6670	6960	7250
30	3900	4050	4200	4350	4500	4650	4800	4950	5100	5250	5400	5550	5700	6000	6300	6600	6900	7200	7500
31	4030	4185	4340	4495	4650	4805	4960	5115	5270	5425	5580	5735	5890	6200	6510	6820	7130	7440	7750
32	4160	4320	4480	4640	4800	4960	5120	5280	5440	5600	5760	5920	6080	6400	6720	7040	7360	7680	8000
33	4290	4455	4620	4785	4950	5115	5280	5445	5610	5775	5940	6105	6270	6600	6930	7260	7590	7920	8250
34	4420	4590	4760	4930	5100	5270	5440	5610	5780	5950	6120	6290	6460	6800	7140	7480	7820	8160	8500
35	4550	4725	4900	5075	5250	5425	5600	5775	5950	6125	6300	6475	6650	7000	7350	7700	8050	8400	8750
36	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6660	6840	7200	7560	7920	8280	8640	9000
37	4810	4995	5180	5365	5550	5735	5920	6105	6290	6475	6660	6845	7030	7400	7770	8140	8510	8880	9250
38	4940	5130	5320	5510	5700	5890	6080	6270	6460	6650	6840	7030	7220	7600	7980	8360	8740	9120	9500
39	5070	5265	5460	5655	5850	6045	6240	6435	6630	6825	7020	7215	7410	7800	8190	8580	8970	9360	9750
40	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000	7200	7400	7600	8000	8400	8800	9200	9600	10000
41	5330	5535	5740	5945	6150	6355	6560	6765	6970	7175	7380	7585	7790	8200	8610	9020	9430	9840	10250
42	5460	5670	5880	6090	6300	6510	6720	6930	7140	7350	7560	7770	7980	8400	8820	9240	9660	10080	10500
43	5590	5805	6020	6235	6450	6665	6880	7095	7310	7525	7740	7955	8170	8600	9030	9460	9890	10320	10750
44	5720	5940	6160	6380	6600	6820	7040	7260	7480	7700	7920	8140	8360	8800	9240	9680	10120	10560	11000
45	5850	6075	6300	6525	6750	6975	7200	7425	7650	7875	8100	8325	8550	9000	9450	9900	10350	10800	11250
46	5980	6210	6440	6670	6900	7130	7360	7590	7820	8050	8280	8510	8740	9200	9660	10120	10580	11040	11500
47	6110	6345	6580	6815	7050	7285	7520	7755	7990	8225	8460	8695	8930	9400	9870	10340	10810	11280	11750
48	6240	6480	6720	6960	7200	7440	7680	7920	8160	8400	8640	8880	9120	9600	10080	10560	11040	11520	12000
49	6370	6615	6860	7105	7350	7595	7840	8085	8330	8575	8820	9065	9310	9800	10290	10780	11270	11760	12250
50	6500	6750	7000	7250	7500	7750	8000	8250	8500	8750	9000	9250	9500	10000	10500	11000	11500	12000	12500

10 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	4500	4750	5000	5250	5500	5750	6000	6250								
26	4680	4940	5200	5460	5720	5980	6240	6500	6760							
27	4860	5130	5400	5670	5940	6210	6480	6750	7020	7290						
28	5040	5320	5600	5880	6160	6440	6720	7000	7280	7560	7840					
29	5220	5510	5800	6090	6380	6670	6960	7250	7540	7830	8120	8410				
30	5400	5700	6000	6300	6600	6900	7200	7500	7800	8100	8400	8700	9000			
31	5580	5890	6200	6510	6820	7130	7440	7750	8060	8370	8680	8990	9300	9610		
32	5760	6080	6400	6720	7040	7360	7680	8000	8320	8640	8960	9280	9600	9920	10240	
33	5940	6270	6600	6930	7260	7590	7920	8250	8580	8910	9240	9570	9900	10230	10560	10890
34	6120	6460	6800	7040	7480	7820	8160	8500	8840	9180	9520	9860	10200	10540	10880	11220
35	6300	6650	7000	7250	7700	8050	8400	8750	9100	9450	9800	10150	10500	10850	11200	11550
36	6480	6840	7200	7460	7920	8280	8640	9000	9360	9720	10080	10440	10800	11160	11520	11880
37	6660	7030	7400	7670	8140	8510	8880	9250	9620	9990	10360	10730	11100	11470	11840	12210
38	6840	7220	7600	7880	8360	8740	9120	9500	9880	10260	10640	11020	11400	11780	12160	12540
39	7020	7410	7800	8190	8580	8970	9360	9750	10140	10530	10920	11310	11700	12090	12480	12870
40	7200	7600	8000	8400	8800	9200	9600	10000	10400	10800	11200	11600	12000	12400	12800	13200
41	7380	7790	8200	8610	9020	9430	9840	10250	10660	11070	11480	11890	12300	12710	13120	13530
42	7560	7980	8400	8820	9240	9660	10080	10500	10920	11340	11760	12180	12600	13020	13440	13860
43	7740	8170	8600	9030	9460	9890	10320	10750	11180	11610	12040	12470	12900	13330	13760	14190
44	7920	8360	8800	9240	9680	10120	10560	11000	11440	11880	12320	12760	13200	13640	14080	14520
45	8100	8550	9000	9450	9900	10350	10800	11250	11700	12150	12600	13050	13500	13950	14400	14850
46	8280	8740	9200	9660	10120	10580	11040	11500	11960	12420	12880	13340	13800	14260	14720	15180
47	8460	8930	9400	9870	10340	10810	11280	11750	12220	12690	13160	13630	14100	14570	15040	15510
48	8640	9120	9600	10080	10560	11040	11520	12000	12480	12960	13440	13920	14400	14880	15360	15840
49	8820	9310	9800	10290	10780	11270	11760	12250	12740	13230	13720	14210	14700	15190	15680	16170
50	9000	9500	10000	10500	11000	11500	12000	12500	13000	13500	14000	14500	15000	15500	16000	16500
52	9360	9880	10400	10920	11440	11960	12480	13000	13520	14040	14560	15080	15600	16120	16640	17160
54	9720	10260	10800	11340	11880	12420	12960	13500	14040	14580	15120	15660	16200	16740	17280	17820
56	10080	10640	11200	11760	12320	12880	13440	14000	14560	15120	15680	16240	16800	17360	17920	18480
58	10440	11020	11600	12180	12760	13340	13920	14500	15080	15660	16240	16820	17400	17980	18560	19140
60	10800	11400	12000	12600	13200	13800	14400	15000	15600	16200	16800	17400	18000	18600	19200	19800
62	11160	11780	12400	13020	13640	14260	14880	15500	16120	16740	17360	17980	18600	19220	19840	20460
64	11520	12160	12800	13440	14080	14720	15360	16000	16640	17280	17920	18560	19200	19840	20480	21120
66	11880	12540	13200	13860	14520	15180	15840	16500	17160	17820	18480	19140	19800	20460	21120	21780
68	12240	12920	13600	14280	14960	15640	16320	17000	17680	18360	19040	19720	20400	21080	21760	22440
70	12600	13300	14000	14700	15400	16100	16800	17500	18200	18900	19600	20300	21000	21700	22400	23100
72	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
74	13320	14060	14800	15540	16280	17020	17760	18500	19240	19980	20720	21460	22200	22940	23680	24420
76	13680	14440	15200	15960	16720	17480	18240	19000	19760	20520	21280	22040	22800	23560	24320	25080
78	14040	14820	15600	16380	17160	17940	18700	19500	20280	21060	21840	22620	23400	24180	24960	25740
80	14400	15200	16000	16800	17600	18400	19200	20000	20800	21600	22400	23200	24000	24800	25600	26400
85	15300	16150	17000	17850	18700	19550	20400	21250	22100	22950	23800	24650	25500	26350	27200	28050
90	16200	17100	18000	18900	19800	20700	21600	22500	23400	24300	25200	26100	27000	27900	28800	29700
95	17100	18050	19000	19950	20900	21850	22800	23750	24700	25650	26600	27550	28500	29450	30400	31350
100	18000	19000	20000	21000	22000	23000	24000	25000	26000	27000	28000	29000	30000	31000	32000	33000
105	18900	19950	21000	22050	23100	24150	25200	26250	27300	28350	29400	30450	31500	32550	33600	34650
110	19800	20900	22000	23100	24200	25300	26400	27500	28600	29700	30800	31900	33000	34100	35200	36300
115	20700	21850	23000	24150	25300	26450	27600	28750	29900	31050	32200	33350	34500	35650	36800	37950
120	21600	22800	24000	25200	26400	27600	28800	30000	31200	32400	33600	34800	36000	37200	38400	39600
125	22500	23750	25000	26250	27500	28750	30000	31250	32500	33750	35000	36250	37500	38750	40000	41250
130	23400	24700	26000	27300	28600	29900	31200	32500	33800	35100	36400	37700	39000	40300	41600	42900
135	24300	25650	27000	28350	29700	31050	32400	33750	35100	36450	37800	39150	40500	41850	43200	44550
140	25200	26600	28000	29400	30800	32200	33600	35000	36400	37800	39200	40600	42000	43400	44800	46200
145	26100	27550	29000	30450	31900	33350	35800	37250	38700	40150	41600	42050	43500	44950	46400	47850
150	27000	28500	30000	31500	33000	34500	36000	37500	39000	40500	42000	43500	45000	46500	48000	49500
155	27900	29450	31000	32550	34100	35650	37200	38750	40300	41850	43400	44950	46500	48050	49600	51150
160	28800	30400	32000	33600	35200	36800	38400	40000	41600	43200	44800	46400	48000	49600	51200	52800
165	29700	31350	33000	34650	36300	37950	39600	41250	42900	44550	46200	47850	49500	51150	52800	54450
170	30600	32300	34000	35700	37400	39100	40800	42500	44200	45900	47600	49300	51000	52700	54400	56100
175	31500	33250	35000	36750	38500	40250	42000	43750	45500	47250	49000	50750	52500	54250	56000	57750
180	32400	34200	36000	37800	39600	41400	43200	45000	46800	48600	50400	52200	54000	55800	57600	59400
185	33300	35150	37000	38850	40700	42550	44400	46250	48100	49950	51800	53650	55500	57350	59200	61050
190	34200	36100	38000	39900	41800	43700	45600	47500	49400	51300	53200	55100	57000	58900	60800	62700
195	35100	37050	39000	40950	42900	44850	46800	48750	50700	52650	54600	56550	58500	60450	62400	64350
200	36000	38000	40000	42000	44000	46000	48000	50000	52000	54000	56000	58000	60000	62000	64000	66000

	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	50
34	11560															
35	11900	12250														
36	12240	12600	12960													
37	12580	12950	13320	13690												
38	12920	13300	13680	14060	14440											
39	13260	13650	14040	14430	14820	15210										
40	13600	14000	14400	14800	15200	15600	16000									
41	13940	14350	14760	15170	15580	15990	16400	16810								
42	14280	14700	15120	15540	15960	16380	16800	17220	17640							
43	14620	15050	15480	15910	16340	16770	17200	17630	18060	18490						
44	14960	15400	15840	16280	16720	17160	17600	18040	18480	18920	19360					
45	15300	15750	16200	16650	17100	17550	18000	18450	18900	19350	19800	20250				
46	15640	16100	16560	17020	17480	17940	18400	18860	19320	19780	20240	20700	21160			
47	15980	16450	16920	17390	17860	18330	18800	19270	19740	20210	20680	21150	21620	22090		
48	16320	16800	17280	17760	18240	18720	19200	19680	20160	20640	21120	21600	22080	22560	23040	
49	16660	17150	17640	18130	18620	19110	19600	20090	20580	21070	21560	22050	22540	23030	23520	24500
50	17000	17500	18000	18500	19000	19500	20000	20500	21000	21500	22000	22500	23000	23500	24000	25000
52	17680	18200	18720	19240	19760	20280	20800	21320	21840	22360	22880	23400	23920	24440	24960	26000
54	18360	18900	19440	19980	20520	21060	21600	22140	22680	23220	23760	24300	24840	25380	25920	27000
56	19040	19600	20160	20720	21280	21840	22400	22960	23520	24080	24640	25200	25760	26320	26880	28000
58	19720	20300	20880	21460	22040	22620	23200	23780	24360	24940	25520	26100	26680	27260	27840	29000
60	20400	21000	21600	22200	22800	23400	24000	24600	25200	25800	26400	27000	27600	28200	28800	30000
62	21080	21700	22320	22940	23560	24180	24800	25420	26040	26660	27280	27900	28520	29140	29760	31000
64	21760	22400	23040	23680	24320	24960	25600	26240	26880	27520	28160	28800	29440	30080	30720	32000
66	22440	23100	23760	24420	25080	25740	26400	27060	27720	28380	29040	29700	30360	31020	31680	33000
68	23120	23800	24480	25160	25840	26520	27200	27880	28560	29240	29920	30600	31280	31960	32640	34000
70	23800	24500	25200	25900	26600	27300	28000	28700	29400	30100	30800	31500	32200	32900	33600	35000
72	24480	25200	25920	26640	27360	28080	28800	29520	30240	30960	31680	32400	33120	33840	34560	36000
74	25160	25900	26640	27380	28120	28860	29600	30340	31080	31820	32560	33300	34040	34780	35520	37000
76	25840	26600	27360	28120	28880	29640	30400	31160	31920	32680	33440	34200	34960	35720	36480	38000
78	26520	27300	28080	28860	29640	30420	31200	31980	32760	33540	34320	35100	35880	36660	37440	39000
80	27200	28000	28800	29600	30400	31200	32000	32800	33600	34400	35200	36000	36800	37600	38400	40000
85	28900	29750	30600	31450	32300	33150	34000	34850	35700	36550	37400	38250	39100	39950	40800	42500
90	30600	31500	32400	33300	34200	35100	36000	36900	37800	38700	39600	40500	41400	42300	43200	45000
95	32300	33250	34200	35150	36100	37050	38000	38950	39900	40850	41800	42750	43700	44650	45600	47500
100	34000	35000	36000	37000	38000	39000	40000	41000	42000	43000	44000	45000	46000	47000	48000	50000
105	35700	36750	37800	38850	39900	40950	42000	43050	44100	45150	46200	47250	48300	49350	50400	52500
110	37400	38500	39600	40700	41800	42900	44000	45100	46200	47300	48400	49500	50600	51700	52800	55000
115	39100	40250	41400	42550	43700	44850	46000	47150	48300	49450	50600	51750	52900	54050	55200	57500
120	40800	42000	43200	44400	45600	46800	48000	49200	50400	51600	52800	54000	55200	56400	57600	60000
125	42500	43750	45000	46250	47500	48750	50000	51250	52500	53750	55000	56250	57500	58750	60000	62500
130	44200	45500	46800	48100	49400	50700	52000	53300	54600	55900	57200	58500	59800	61100	62400	65000
135	45900	47250	48600	49950	51300	52650	54000	55350	56700	58050	59400	60750	62100	63450	64800	67500
140	47600	49000	50400	51800	53200	54600	56000	57400	58800	60200	61600	63000	64400	65800	67200	70000
145	49300	50750	52200	53650	55100	56550	58000	59450	60900	62350	63800	65250	66700	68150	69600	72500
150	51000	52500	54000	55500	57000	58500	60000	61500	63000	64500	66000	67500	69000	70500	72000	75000
155	52700	54250	55800	57350	58900	60450	62000	63550	65100	66650	68200	69750	71300	72850	74400	77500
160	54400	56000	57600	59200	60800	62400	64000	65600	67200	68800	70400	72000	73600	75200	76800	80000
165	56100	57750	59400	61050	62700	64350	66000	67650	69300	70950	72600	74250	75900	77550	79200	82500
170	57800	59500	61200	62900	64600	66300	68000	69700	71400	73100	74800	76500	78200	79900	81600	85000
175	59500	61250	63000	64750	66500	68250	70000	71750	73500	75250	77000	78750	80500	82250	84000	87500
180	61200	63000	64800	66600	68400	70200	72000	73800	75600	77400	79200	81000	82800	84600	86400	90000
185	62900	64750	66600	68450	70300	72150	74000	75850	77700	79550	81400	83250	85100	86950	88800	92500
190	64600	66500	68400	70300	72200	74100	76000	77900	79800	81700	83600	85500	87400	89300	91200	95000
195	66300	68250	70200	72150	74100	76050	78000	79950	81900	83850	85800	87750	89700	91650	93600	97500
200	68000	70000	72000	74000	76000	78000	80000	82000	84000	86000	88000	90000	92000	94000	96000	100000

10 $\frac{1}{2}$ CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6	6 $\frac{1}{2}$	7	7 $\frac{1}{2}$	8	8 $\frac{1}{2}$	9	9 $\frac{1}{2}$	10	10 $\frac{1}{2}$	11	11 $\frac{1}{2}$	12	12 $\frac{1}{2}$
3	95																			
3 $\frac{1}{2}$	110	129																		
4	126	147	168																	
4 $\frac{1}{2}$	142	165	189	213																
5	158	184	210	236	263															
5 $\frac{1}{2}$	173	202	231	260	289	318														
6	189	221	252	284	315	347	378													
6 $\frac{1}{2}$	205	239	273	307	341	375	410	444												
7	221	257	294	331	368	404	441	478	515											
7 $\frac{1}{2}$	236	276	315	354	394	433	473	512	551	591										
8	252	294	336	378	420	462	504	546	588	630	672									
8 $\frac{1}{2}$	268	312	357	402	446	491	536	580	625	669	714	759								
9	284	331	378	425	473	520	567	615	662	709	756	803	851							
9 $\frac{1}{2}$	299	349	399	449	499	549	599	648	698	748	798	848	898	948						
10	315	368	420	473	525	578	630	683	735	788	840	893	945	998	1050					
10 $\frac{1}{2}$	331	386	441	496	551	606	662	717	772	827	882	937	992	1047	1103	1158				
11	347	404	462	520	578	635	693	751	809	866	924	982	1040	1097	1155	1213	1271			
11 $\frac{1}{2}$	362	423	483	543	604	664	725	785	845	906	966	1026	1087	1147	1208	1268	1328	1389		
12	378	441	504	567	630	693	756	819	882	945	1008	1071	1134	1197	1260	1323	1386	1449	1512	
12 $\frac{1}{2}$	394	459	525	591	656	722	788	853	919	984	1050	1116	1181	1247	1313	1378	1444	1509	1575	1641
13	410	478	546	614	683	751	819	887	956	1024	1092	1160	1229	1297	1365	1433	1502	1570	1638	1706
13 $\frac{1}{2}$	425	496	567	638	709	780	851	921	992	1063	1134	1205	1276	1347	1418	1488	1559	1630	1701	1772
14	441	515	588	662	735	809	882	956	1029	1103	1176	1250	1323	1397	1470	1544	1617	1691	1764	1838
14 $\frac{1}{2}$	457	533	609	685	761	837	914	990	1066	1142	1218	1294	1370	1446	1523	1599	1675	1751	1827	1903
15	473	551	630	709	788	866	945	1024	1103	1181	1260	1339	1418	1496	1575	1654	1733	1811	1890	1969
15 $\frac{1}{2}$	488	570	651	732	814	895	977	1058	1139	1221	1302	1383	1465	1546	1628	1709	1790	1872	1953	2034
16	504	588	672	756	840	924	1008	1092	1176	1260	1344	1428	1512	1596	1680	1764	1848	1932	2016	2100
16 $\frac{1}{2}$	520	606	693	780	866	953	1040	1126	1213	1299	1386	1473	1559	1646	1733	1819	1906	1992	2079	2166
17	536	625	714	803	893	982	1071	1160	1250	1339	1428	1517	1607	1696	1785	1874	1964	2053	2142	2231
17 $\frac{1}{2}$	551	643	735	827	919	1011	1103	1194	1286	1378	1470	1562	1654	1746	1838	1929	2021	2113	2205	2297
18	567	662	756	851	945	1040	1134	1229	1323	1418	1512	1607	1701	1796	1890	1985	2079	2174	2268	2363
18 $\frac{1}{2}$	583	680	777	874	971	1068	1166	1263	1360	1457	1554	1651	1748	1845	1943	2040	2137	2234	2331	2428
19	599	698	798	898	998	1097	1197	1297	1397	1496	1596	1696	1796	1895	1995	2095	2195	2294	2394	2494
19 $\frac{1}{2}$	614	717	819	921	1024	1126	1229	1331	1433	1536	1638	1740	1843	1945	2048	2150	2252	2355	2457	2559
20	630	735	840	945	1050	1155	1260	1365	1470	1575	1680	1785	1890	1995	2100	2205	2310	2415	2520	2625
21	662	772	882	992	1103	1213	1323	1433	1544	1654	1764	1874	1985	2095	2205	2315	2426	2536	2646	2756
22	693	809	924	1040	1155	1271	1386	1502	1617	1733	1848	1964	2079	2195	2310	2426	2541	2657	2772	2888
23	725	845	966	1087	1208	1328	1449	1570	1691	1811	1932	2053	2174	2294	2415	2536	2657	2777	2898	3019
24	756	882	1008	1134	1260	1386	1512	1638	1764	1890	2016	2142	2268	2394	2520	2646	2772	2898	3024	3150
25	788	919	1050	1181	1313	1444	1575	1706	1838	1969	2100	2231	2363	2494	2625	2756	2888	3019	3150	3281
26	819	956	1092	1229	1365	1502	1638	1775	1911	2048	2184	2321	2457	2594	2730	2867	3003	3140	3276	3413
27	851	992	1134	1276	1418	1559	1701	1843	1985	2126	2268	2410	2552	2693	2835	2977	3119	3260	3402	3544
28	882	1029	1176	1323	1470	1617	1764	1911	2058	2205	2352	2499	2646	2793	2940	3087	3234	3381	3528	3675
29	914	1066	1218	1370	1523	1675	1827	1979	2132	2284	2436	2588	2741	2893	3045	3197	3350	3502	3654	3806
30	945	1103	1260	1418	1575	1733	1890	2048	2205	2363	2520	2678	2835	2993	3150	3308	3465	3623	3780	3938
31	977	1139	1302	1465	1628	1790	1953	2116	2279	2441	2604	2767	2930	3092	3255	3418	3581	3743	3906	4069
32	1008	1176	1344	1512	1680	1848	2016	2184	2352	2520	2688	2856	3024	3192	3360	3528	3696	3864	4032	4200
33	1040	1213	1386	1559	1733	1906	2079	2252	2426	2599	2772	2945	3119	3292	3465	3638	3812	3985	4158	4331
34	1071	1250	1428	1607	1785	1964	2142	2321	2499	2678	2856	3035	3213	3392	3570	3749	3927	4106	4284	4463
35	1103	1286	1470	1654	1838	2021	2205	2389	2573	2756	2940	3124	3308	3491	3675	3859	4043	4226	4410	4594
36	1134	1323	1512	1701	1890	2079	2268	2457	2646	2835	3024	3213	3402	3591	3780	3969	4158	4347	4536	4725
37	1166	1360	1554	1748	1943	2137	2331	2525	2720	2914	3108	3302	3497	3691	3885	4079	4274	4468	4662	4856
38	1197	1397	1596	1796	1995	2195	2394	2594	2793	2993	3192	3392	3591	3791	3990	4190	4389	4589	4788	4988
39	1229	1433	1638	1843	2048	2252	2457	2662	2867	3071	3276	3481	3686	3890	4095	4300	4505	4709	4914	5119
40	1260	1470	1680	1890	2100	2310	2520	2730	2940	3150	3360	3570	3780	3990	4200	4410	4620	4830	5040	5250
41	1292	1507	1722	1937	2153	2368	2583	2798	3014	3229	3444	3659	3875	4090	4305	4520	4736	4951	5166	5381
42	1323	1544	1764	1985	2205	2426	2646	2867	3087	3308	3528	3749	3969	4190	4410	4631	4851	5072	5292	5513
43	1355	1580	1806	2032	2258	2483	2709	2935	3161	3386	3612	3838	4064	4290	4515	4741	4967	5192	5418	5644
44	1386	1617	1848	2079	2310	2541	2772	3003	3234	3465	3696	3927	4158	4389	4620	4851	5082	5313	5544	5775
45	1418	1654	1890	2126	2363	2599	2835	3071	3308	3544	3780	4016	4253	4489	4725	4961	5198	5434	5670	5906
46	1449	1691	1932	2174	2415	2657	2898	3140	3381	3623	3864	4106	4347	4589	4830	5072	5313	5555	5796	6038
47	1481	1727	1974	2221	2468	2714	2961	3208	3455	3701	3948	4195	4442	4688	4935	5182	5429	5675	5922	6169
48	1512	1764	2016	2268	2520	2772	3024	3276	3528	3780	4032	4284	4536	4788	5040	5292	5544	5796	6048	6300
49	1544	1801	2058	2315	2573	2830	3087	3344	3602	3859	4116	4373	4631	4888	5145	5402	5660	5917	6174	6431
50	1575	1838	2100	2363	2625	2888	3150	3413	3675	3938	4200	4463	4725	4988	5250	5513	5775	6038	6300	6563

SMALLER HAVING CEILINGS 10¹/₂ FT. HIGH. 10¹/₂

	13	13 ¹ / ₂	14	14 ¹ / ₂	15	15 ¹ / ₂	16	16 ¹ / ₂	17	17 ¹ / ₂	18	18 ¹ / ₂	19	20	21	22	23	24	25
13	1775																		
13 ¹ / ₂	1843	1914																	
14	1911	1985	2058																
14 ¹ / ₂	1979	2055	2132	2208															
15	2048	2126	2205	2284	2363														
15 ¹ / ₂	2116	2197	2279	2360	2441	2523													
16	2184	2268	2352	2436	2520	2604	2688												
16 ¹ / ₂	2252	2339	2426	2512	2599	2685	2772	2859											
17	2321	2410	2499	2588	2678	2767	2856	2945	3035										
17 ¹ / ₂	2389	2481	2573	2664	2756	2848	2940	3032	3123	3216									
18	2457	2552	2646	2741	2835	2930	3024	3119	3213	3308	3402								
18 ¹ / ₂	2525	2622	2720	2817	2914	3011	3108	3205	3302	3399	3497	3594							
19	2594	2693	2793	2893	2993	3092	3192	3292	3392	3491	3591	3691	3791						
19 ¹ / ₂	2661	2764	2867	2969	3071	3174	3276	3378	3481	3583	3686	3788	3890						
20	2730	2835	2940	3045	3150	3255	3360	3465	3570	3675	3780	3885	3990	4200					
21	2867	2977	3087	3197	3308	3418	3528	3638	3749	3859	3969	4079	4190	4410	4631				
22	3003	3119	3234	3350	3465	3581	3696	3812	3927	4043	4158	4274	4389	4620	4851	5082			
23	3140	3260	3381	3502	3623	3743	3864	3985	4106	4226	4347	4468	4589	4830	5072	5313	5555		
24	3276	3402	3528	3654	3780	3906	4032	4158	4284	4410	4536	4662	4788	5040	5292	5544	5796	6048	
25	3413	3544	3675	3806	3938	4069	4200	4331	4463	4594	4725	4856	4988	5250	5513	5775	6038	6300	6563
26	3549	3686	3822	3959	4095	4232	4368	4505	4641	4778	4914	5051	5187	5460	5733	6006	6279	6552	6825
27	3686	3827	3969	4111	4253	4394	4536	4678	4820	4961	5103	5245	5387	5670	5954	6237	6521	6804	7088
28	3822	3969	4116	4263	4410	4557	4704	4851	4998	5145	5292	5439	5586	5880	6174	6468	6762	7056	7350
29	3959	4111	4263	4415	4568	4720	4872	5024	5177	5329	5481	5633	5786	6090	6395	6699	7004	7308	7613
30	4095	4253	4410	4568	4725	4883	5040	5198	5355	5513	5670	5828	5985	6300	6615	6930	7245	7560	7875
31	4232	4394	4557	4720	4883	5045	5208	5371	5534	5696	5859	6022	6185	6510	6836	7161	7487	7812	8138
32	4368	4536	4704	4872	5040	5208	5376	5544	5712	5880	6048	6216	6384	6720	7056	7392	7728	8064	8400
33	4505	4678	4851	5024	5198	5371	5544	5717	5891	6064	6237	6410	6584	6930	7277	7623	7970	8316	8663
34	4641	4820	4998	5177	5355	5534	5712	5891	6069	6248	6426	6605	6783	7140	7497	7854	8211	8568	8925
35	4778	4961	5145	5329	5513	5696	5880	6064	6248	6431	6615	6799	6983	7350	7718	8085	8453	8820	9188
36	4914	5103	5292	5481	5670	5859	6048	6237	6426	6615	6804	6993	7182	7560	7938	8316	8694	9072	9450
37	5051	5245	5439	5633	5828	6022	6216	6410	6605	6799	6993	7188	7382	7770	8159	8547	8936	9324	9713
38	5187	5387	5586	5786	5985	6185	6384	6584	6783	6983	7182	7382	7581	7980	8379	8778	9177	9576	9975
39	5324	5528	5733	5938	6143	6347	6552	6757	6962	7166	7371	7576	7781	8190	8600	9009	9419	9828	10238
40	5460	5670	5880	6090	6300	6510	6720	6930	7140	7350	7560	7770	7980	8400	8820	9240	9660	10080	10500
41	5597	5812	6027	6242	6458	6673	6888	7103	7319	7534	7749	7964	8180	8610	9041	9471	9902	10332	10763
42	5733	5954	6174	6395	6615	6836	7056	7277	7497	7718	7938	8159	8379	8820	9261	9702	10143	10584	11025
43	5870	6095	6321	6547	6773	6998	7224	7450	7676	7901	8127	8353	8579	9030	9482	9933	10385	10836	11288
44	6006	6237	6468	6699	6930	7161	7392	7623	7854	8085	8316	8547	8778	9240	9702	10164	10626	11088	11550
45	6143	6379	6615	6851	7088	7324	7560	7796	8033	8269	8505	8741	8978	9450	9923	10395	10868	11340	11813
46	6279	6521	6762	7004	7245	7487	7728	7970	8211	8453	8694	8936	9177	9660	10143	10626	11109	11592	12075
47	6416	6662	6909	7156	7403	7649	7896	8143	8390	8636	8883	9130	9377	9870	10364	10857	11351	11844	12338
48	6552	6804	7056	7308	7560	7812	8064	8316	8568	8820	9072	9324	9576	10080	10584	11088	11592	12096	12600
49	6689	6946	7203	7460	7718	7975	8232	8489	8747	9004	9261	9518	9776	10290	10805	11319	11834	12348	12863
50	6825	7088	7350	7613	7875	8138	8400	8663	8925	9188	9450	9713	9975	10500	11025	11550	12075	12600	13125

	8	8½	9	9½	10	10½	11	11½	12	12½
3	99									
3½	115	134								
4	132	154	176							
4½	148	173	198	222						
5	165	192	220	247	275					
5½	181	211	242	272	302	332				
6	198	231	264	297	330	363	396			
6½	214	250	286	321	357	393	429	464		
7	231	269	308	346	385	423	462	500	539	
7½	247	288	330	371	412	453	495	536	577	618
8	264	308	352	396	440	484	528	572	616	660
8½	280	327	374	420	467	514	561	607	654	701
9	297	346	396	445	495	544	594	643	693	742
9½	313	365	418	470	522	574	627	679	731	783
10	330	385	440	495	550	605	660	715	770	825
10½	346	404	462	519	577	635	693	750	808	866
11	363	423	484	544	605	665	726	786	847	907
11½	379	442	506	569	632	695	759	822	885	948
12	396	462	528	594	660	726	792	858	924	990
12½	412	481	550	618	687	756	825	893	962	1031
13	429	500	572	643	715	786	858	929	1001	1072
13½	445	519	594	668	742	816	891	963	1039	1113
14	462	539	616	693	770	847	924	1001	1078	1155
14½	478	558	638	717	797	877	957	1036	1116	1196
15	495	577	660	742	825	907	990	1072	1155	1237
15½	511	596	682	767	852	937	1023	1108	1193	1278
16	528	616	704	792	880	968	1056	1144	1232	1320
16½	544	635	726	816	907	998	1089	1179	1270	1361
17	561	654	748	841	935	1028	1122	1215	1309	1402
17½	577	673	770	866	962	1058	1155	1251	1347	1443
18	594	693	792	891	990	1089	1188	1287	1386	1485
18½	610	712	814	915	1017	1119	1221	1322	1424	1526
19	627	731	836	940	1045	1149	1254	1358	1463	1567
19½	643	750	858	965	1072	1179	1284	1394	1501	1608
20	660	770	880	990	1100	1210	1320	1430	1540	1650
21	693	808	924	1039	1155	1270	1386	1501	1617	1732
22	726	847	968	1089	1210	1331	1452	1573	1694	1815
23	759	885	1012	1138	1265	1391	1518	1644	1771	1897
24	792	924	1056	1188	1320	1452	1584	1716	1848	1980
25	825	962	1100	1237	1375	1512	1650	1787	1925	2062
26	858	1001	1144	1287	1430	1573	1716	1859	2002	2145
27	891	1039	1188	1336	1485	1633	1782	1930	2079	2227
28	924	1078	1232	1386	1540	1694	1848	2002	2156	2310
29	957	1116	1276	1435	1595	1754	1914	2073	2233	2393
30	990	1155	1320	1485	1650	1815	1980	2145	2310	2475
31	1023	1193	1364	1534	1705	1875	2046	2216	2387	2557
32	1056	1232	1408	1584	1760	1936	2112	2288	2464	2640
33	1089	1270	1452	1633	1815	1996	2178	2359	2541	2722
34	1122	1309	1496	1688	1870	2057	2244	2431	2618	2805
35	1155	1347	1540	1732	1925	2117	2310	2502	2695	2887
36	1188	1386	1584	1782	1980	2178	2376	2574	2772	2970
37	1221	1424	1628	1831	2035	2239	2442	2645	2848	3052
38	1254	1463	1672	1881	2090	2299	2508	2717	2926	3135
39	1287	1501	1716	1930	2145	2359	2574	2788	3003	3217
40	1320	1540	1760	1980	2200	2420	2640	2860	3080	3330
41	1353	1578	1804	2029	2255	2480	2706	2931	3157	3380
42	1386	1617	1848	2079	2310	2541	2772	3003	3234	3465
43	1419	1655	1892	2128	2365	2601	2838	3074	3311	3547
44	1452	1694	1936	2178	2420	2662	2904	3146	3388	3630
45	1485	1732	1980	2227	2475	2722	2970	3217	3465	3712
46	1518	1771	2024	2277	2530	2783	3036	3289	3542	3795
47	1551	1809	2068	2326	2585	2833	3102	3360	3619	3877
48	1584	1848	2112	2376	2640	2904	3168	3432	3696	3960
49	1617	1886	2156	2425	2695	2964	3234	3503	3773	4042
50	1650	1925	2200	2475	2750	3025	3300	3575	3850	4125
8½										
9½										
10½										
11½										
12½										
13½										
14½										
15½										
16½										
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39½										
40½										
41½										
42½										
43½										
44½										
45½										
46½										
47½										
48½										
49½										
50½										

ALWAYS USE SMALLEST NUMBER AT TOP AND LARGEST AT SIDE

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	1859																	
13½	1920	2004																
14	2002	2079	2156															
14½	2073	2153	2233	2312														
15	2145	2227	2310	2392	2475													
15½	2216	2301	2387	2472	2557	2642												
16	2288	2376	2464	2552	2640	2728	2816											
16½	2358	2448	2539	2630	2721	2811	2902	2993										
17	2431	2524	2618	2711	2805	2898	2992	3085	3179									
17½	2502	2598	2695	2791	2887	2983	3080	3176	3272	3368								
18	2574	2673	2772	2871	2970	3069	3168	3267	3366	3465	3564							
18½	2645	2747	2849	2950	3052	3154	3256	3357	3459	3561	3663							
19	2717	2821	2926	3030	3135	3239	3344	3448	3553	3657	3762	3971						
19½	2788	2895	3003	3110	3217	3324	3432	3539	3646	3753	3861	4075						
20	2860	2970	3080	3190	3300	3410	3520	3630	3740	3850	3960	4180	4400					
21	3003	3118	3234	3349	3465	3580	3696	3811	3927	4042	4158	4389	4620	4857				
22	3146	3267	3388	3509	3630	3751	3872	3993	4114	4235	4356	4598	4840	5082	5324			
23	3289	3415	3542	3668	3795	3921	4048	4174	4301	4427	4554	4807	5060	5313	5566	5819		
24	3432	3564	3696	3828	3960	4092	4224	4356	4488	4620	4752	5016	5280	5544	5808	6072	6336	
25	3575	3712	3850	3987	4125	4262	4400	4537	4675	4812	4950	5225	5500	5775	6050	6325	6600	6875
26	3718	3861	4004	4147	4290	4433	4576	4719	4862	5005	5148	5434	5720	6006	6292	6578	6864	7150
27	3861	4009	4158	4306	4455	4603	4752	4900	5049	5197	5346	5643	5940	6237	6534	6831	7128	7425
28	4004	4158	4312	4466	4620	4774	4928	5082	5236	5390	5544	5852	6160	6468	6776	7084	7392	7700
28½	4147	4306	4466	4625	4785	4944	5104	5263	5423	5582	5742	6061	6380	6699	7018	7337	7656	7975
30	4290	4455	4620	4785	4950	5115	5280	5445	5610	5775	5940	6270	6600	6930	7260	7590	7920	8250
31	4433	4603	4774	4944	5115	5285	5456	5626	5797	5967	6130	6479	6820	7161	7502	7843	8184	8525
32	4576	4752	4928	5104	5280	5456	5632	5808	5984	6160	6336	6688	7040	7392	7744	8096	8448	8800
33	4719	4900	5082	5263	5445	5626	5808	5989	6171	6352	6534	6897	7260	7623	7986	8349	8712	9075
34	4862	5049	5236	5423	5610	5797	5984	6171	6358	6545	6732	7106	7480	7854	8228	8602	8976	9350
35	5005	5197	5390	5582	5775	5967	6160	6352	6545	6737	6930	7315	7700	8085	8470	8855	9240	9625
36	5148	5346	5544	5742	5940	6138	6336	6534	6732	6930	7128	7524	7920	8316	8712	9108	9504	9900
37	5291	5494	5698	5901	6105	6308	6512	6715	6919	7122	7326	7733	8140	8547	8954	9361	9768	10175
38	5434	5643	5852	6061	6270	6479	6688	6897	7106	7315	7524	7942	8360	8778	9196	9614	10032	10450
39	5577	5791	6006	6220	6435	6649	6864	7078	7293	7507	7722	8151	8580	9009	9438	9867	10296	10725
40	5720	5940	6160	6380	6600	6820	7040	7260	7480	7700	7920	8360	8800	9240	9680	10120	10560	11000
41	5863	6088	6314	6539	6765	6990	7216	7441	7667	7892	8118	8569	9020	9471	9922	10373	10824	11275
42	6006	6237	6468	6699	6930	7161	7392	7623	7854	8085	8316	8778	9240	9702	10164	10626	11088	11550
43	6149	6385	6622	6858	7095	7331	7568	7804	8041	8277	8514	8987	9460	9933	10406	10879	11353	11825
44	6292	6534	6776	7018	7260	7502	7744	7986	8228	8470	8712	9196	9680	10164	10648	11132	11616	12100
45	6435	6682	6930	7177	7425	7672	7920	8167	8415	8662	8910	9405	9900	10395	10890	11385	11880	12375
46	6578	6831	7084	7337	7590	7843	8096	8349	8602	8855	9108	9614	10120	10626	11132	11638	12144	12650
47	6721	6979	7238	7496	7755	8013	8272	8530	8789	9047	9306	9823	10340	10857	11374	11891	12408	12925
48	6864	7128	7392	7656	7920	8184	8448	8712	8976	9240	9504	10032	10560	11088	11616	12144	12672	13200
49	7007	7276	7546	7815	8085	8354	8624	8893	9163	9432	9702	10241	10780	11319	11858	12397	12936	13475
50	7150	7425	7700	7975	8250	8525	8800	9075	9350	9625	9900	10450	11000	11550	12100	12650	13200	13750

WHEN THE EXACT SIZE IS NOT GIVEN USE THE NEXT LARGER.

11 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	4950	5225	5500	5775	6050	6325	6600	6875								
26	5148	5434	5720	6006	6292	6578	6864	7150	7436							
27	5346	5643	5940	6237	6534	6831	7128	7425	7722	8019						
28	5544	5852	6160	6468	6776	7084	7392	7700	8008	8316	8624					
29	5742	6061	6380	6699	7018	7337	7656	7975	8294	8613	8932	9251				
30	5940	6270	6600	6930	7260	7590	7920	8250	8580	8910	9240	9570	9900			
31	6138	6479	6820	7161	7502	7843	8184	8525	8866	9207	9548	9889	10230	10571		
32	6336	6688	7040	7392	7744	8096	8448	8800	9152	9504	9856	10208	10560	10912	11264	
33	6534	6897	7260	7623	7986	8349	8712	9075	9438	9801	10164	10527	10890	11253	11616	11979
34	6732	7106	7480	7854	8228	8602	8976	9350	9724	10098	10472	10846	11220	11594	11968	12342
35	6930	7315	7700	8085	8470	8855	9240	9625	10010	10395	10780	11165	11550	11935	12320	12705
36	7128	7524	7920	8316	8712	9108	9504	9900	10296	10692	11088	11484	11880	12276	12672	13068
37	7326	7733	8140	8547	8954	9361	9768	10175	10582	10989	11396	11803	12210	12617	13024	13431
38	7524	7942	8360	8778	9196	9614	10032	10450	10868	11286	11704	12122	12540	12958	13376	13794
39	7722	8151	8580	9009	9438	9867	10296	10725	11154	11583	12012	12441	12870	13299	13728	14157
40	7920	8360	8800	9240	9680	10120	10560	11000	11440	11880	12320	12760	13200	13640	14080	14520
41	8118	8569	9020	9471	9922	10373	10824	11275	11726	12177	12628	13079	13530	13981	14432	14883
42	8316	8778	9240	9702	10164	10626	11088	11550	12012	12474	12936	13398	13860	14322	14784	15246
43	8514	8987	9460	9933	10406	10879	11352	11825	12298	12771	13244	13717	14190	14663	15136	15609
44	8712	9196	9680	10164	10648	11132	11616	12100	12584	13068	13552	14036	14520	15004	15488	15972
45	8910	9405	9900	10395	10890	11385	11880	12375	12870	13365	13860	14355	14850	15345	15840	16335
46	9108	9614	10120	10626	11132	11638	12144	12650	13156	13662	14168	14674	15180	15686	16192	16698
47	9306	9823	10340	10857	11374	11891	12408	12925	13442	13959	14476	14993	15510	16027	16544	17061
48	9504	10032	10560	11088	11616	12144	12672	13200	13728	14256	14784	15312	15840	16368	16896	17424
49	9702	10241	10780	11319	11858	12397	12936	13475	14014	14553	15092	15631	16170	16709	17248	17787
50	9900	10450	11000	11550	12100	12650	13200	13750	14300	14850	15400	15950	16500	17050	17600	18150
52	10296	10868	11440	12012	12584	13156	13728	14300	14872	15444	16016	16588	17160	17732	18304	18876
54	10692	11286	11880	12474	13068	13662	14256	14850	15444	16038	16632	17226	17820	18414	19008	19602
56	11088	11704	12320	12936	13552	14168	14784	15400	16016	16632	17248	17864	18480	19096	19712	20328
58	11484	12122	12760	13398	14036	14674	15312	15950	16588	17226	17864	18502	19140	19778	20416	21054
60	11880	12540	13200	13860	14520	15180	15840	16500	17160	17820	18480	19140	19800	20460	21120	21780
62	12276	12958	13640	14322	15004	15686	16368	17050	17732	18414	19096	19778	20460	21142	21824	22506
64	12672	13376	14080	14784	15488	16192	16896	17600	18304	19008	19712	20416	21120	21824	22528	23232
66	13068	13794	14520	15246	15972	16698	17424	18150	18876	19602	20328	21054	21780	22506	23232	23958
68	13464	14212	14960	15708	16456	17204	17952	18700	19448	20196	20944	21692	22440	23188	23936	24684
70	13860	14630	15400	16170	16940	17710	18480	19250	20020	20790	21560	22330	23100	23870	24640	25410
72	14256	15048	15840	16632	17424	18216	19008	19800	20592	21384	22176	22968	23760	24552	25344	26136
74	14652	15466	16280	17094	17908	18722	19536	20350	21164	21978	22792	23606	24420	25234	26048	26862
76	15048	15884	16720	17556	18392	19228	20064	20900	21736	22572	23408	24244	25080	25916	26752	27588
78	15444	16302	17160	18018	18876	19734	20592	21450	22308	23166	24024	24882	25740	26598	27456	28314
80	15840	16720	17600	18480	19360	20240	21120	22000	22880	23760	24640	25520	26400	27280	28160	29040
85	16830	17765	18700	19635	20570	21505	22440	23375	24310	25245	26180	27115	28050	28985	29920	30855
90	17820	18810	19800	20790	21780	22770	23760	24750	25740	26730	27720	28710	29700	30690	31680	32670
95	18810	19855	20900	21945	22990	24035	25080	26125	27170	28215	29260	30305	31350	32395	33440	34485
100	19800	20900	22000	23100	24200	25300	26400	27500	28600	29700	30800	31900	33000	34100	35200	36300
105	20790	21945	23100	24255	25410	26565	27720	28875	30030	31185	32340	33495	34650	35805	36960	38115
110	21780	22990	24200	25410	26620	27830	29040	30250	31460	32670	33880	35090	36300	37510	38720	39930
115	22770	24035	25300	26565	27830	29095	30360	31625	32890	34155	35420	36685	37950	39215	40480	41745
120	23760	25080	26400	27720	29040	30360	31680	33000	34320	35640	36960	38280	39600	40920	42240	43560
125	24750	26125	27500	28875	30250	31625	33000	34375	35750	37125	38500	39875	41250	42625	44000	45375
130	25740	27210	28680	30030	31460	32890	34320	35750	37180	38610	40040	41470	42900	44330	45760	47190
135	26730	28255	29700	31185	32670	34155	35640	37125	38610	40095	41580	43065	44550	46035	47520	49005
140	27720	29260	30800	32340	33880	35420	36960	38500	40040	41580	43120	44660	46200	47740	49280	50820
145	28710	30305	31900	33495	35090	36685	38280	39875	41470	43065	44660	46255	47850	49445	51040	52635
150	29700	31350	33000	34650	36300	37950	39600	41250	42900	44550	46200	47850	49500	51150	52800	54450
155	30690	32395	34100	35805	37510	39215	40920	42625	44330	46035	47740	49445	51150	52855	54560	56265
160	31680	33440	35200	36960	38720	40480	42240	44000	45760	47520	49280	51040	52800	54560	56320	58080
165	32670	34485	36300	38115	39930	41745	43560	45375	47190	49005	50820	52635	54450	56265	58080	59895
170	33660	35530	37400	39270	41140	43010	44880	46750	48620	50490	52360	54230	56100	57970	59840	61710
175	34650	36575	38500	40425	42350	44275	46200	48125	50050	51975	53900	55825	57750	59675	61600	63525
180	35640	37620	39600	41580	43560	45540	47520	49500	51480	53460	55440	57420	59400	61380	63360	65340
185	36630	38630	40700	42735	44770	46805	48840	50875	52910	54945	56980	59015	61050	63085	65120	67155
190	37620	39710	41800	43890	45980	48070	50160	52250	54340	56430	58520	60610	62700	64790	66880	68970
195	38610	40755	42900	45045	47190	49335	51480	53625	55770	57915	60060	62205	64350	66495	68640	70785
200	39600	41800	44000	46200	48400	50600	52800	55000	57200	59400	61600	63800	66000	68200	70400	72600

	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	50
34 12716																
35 13090	13475															
36 13464	13860	14256														
37 13838	14245	14652	15050													
38 14212	14630	15048	15466	15884												
39 14586	15015	15444	15873	16302	16731											
40 14960	15400	15840	16280	16720	17160	17600										
41 15334	15785	16236	16687	17138	17589	18040	18491									
42 15708	16170	16632	17094	17556	18018	18480	18942	19404								
43 16082	16555	17028	17501	17974	18447	18920	19393	19866	20339							
44 16456	16940	17424	17908	18392	18876	19360	19844	20328	20812							
45 16830	17325	17820	18315	18810	19305	19800	20295	20790	21285	21780						
46 17204	17710	18216	18722	19228	19734	20240	20746	21252	21758	22264	22770					
47 17578	18095	18612	19129	19646	20163	20680	21197	21714	22231	22748	23265	23782				
48 17952	18480	19008	19536	20064	20592	21120	21648	22176	22704	23232	23760	24288	24816			
49 18326	18865	19404	19943	20482	21021	21560	22099	22638	23177	23716	24255	24794	25333	25872		
50 18700	19250	19800	20350	20900	21450	22000	22550	23100	23650	24200	24750	25300	25850	26400	27500	
52 19448	20020	20592	21164	21736	22308	22880	23452	24024	24596	25168	25740	26312	26884	27456	28600	
54 20196	20790	21384	21978	22572	23166	23760	24354	24948	25542	26136	26730	27324	27918	28512	29700	
56 20944	21560	22176	22792	23408	24024	24640	25256	25872	26488	27104	27720	28336	28952	29568	30800	
58 21692	22330	22968	23606	24244	24882	25520	26158	26796	27434	28072	28710	29348	29986	30624	31900	
60 22440	23100	23760	24420	25080	25740	26400	27060	27720	28380	29040	29700	30360	31020	31680	33000	
62 23188	23870	24552	25234	25916	26598	27280	27962	28644	29326	30008	30690	31372	32054	32736	34100	
64 23936	24640	25344	26048	26752	27456	28160	28864	29568	30272	30976	31680	32384	33088	33792	35200	
66 24684	25410	26136	26862	27588	28314	29040	29766	30492	31218	31944	32670	33396	34122	34848	36300	
68 25432	26180	26928	27676	28424	29172	29920	30668	31416	32164	32912	33660	34408	35156	35904	37400	
70 26180	26950	27720	28490	29260	30030	30800	31570	32340	33110	33880	34650	35420	36190	36960	38500	
72 26928	27720	28512	29304	30096	30888	31680	32472	33264	34056	34848	35640	36432	37224	38016	39600	
74 27676	28490	29304	30118	30932	31746	32560	33374	34188	35002	35816	36630	37444	38258	39072	40700	
76 28424	29260	30096	30932	31768	32604	33440	34276	35112	35948	36784	37620	38456	39292	40128	41800	
78 29172	30030	30888	31746	32604	33462	34320	35178	36036	36894	37752	38610	39468	40326	41184	42900	
80 29920	30800	31680	32560	33440	34320	35200	36080	36960	37840	38720	39600	40480	41360	42240	44000	
85 31790	32725	33660	34595	35530	36465	37400	38335	39270	40205	41140	42075	43010	43945	44880	46750	
90 33660	34650	35640	36630	37620	38610	39600	40590	41580	42570	43560	44550	45540	46530	47520	49500	
95 35530	36575	37620	38665	39710	40755	41800	42845	43890	44935	45980	47025	48070	49115	50160	52250	
100 37400	38500	39600	40700	41800	42900	44000	45100	46200	47300	48400	49500	50600	51700	52800	55000	
105 39270	40425	41580	42735	43890	45045	46200	47355	48510	49665	50820	51975	53130	54285	55440	57750	
110 41140	42350	43560	44770	45980	47190	48400	49610	50820	52030	53240	54450	55660	56870	58080	60500	
115 43010	44275	45540	46805	48070	49335	50600	51865	53130	54395	55660	56925	58190	59455	60720	63250	
120 44880	46200	47520	48840	50160	51480	52800	54120	55440	56760	58080	59400	60720	62040	63360	66000	
125 46750	48125	49500	50875	52250	53625	55000	56375	57750	59125	60500	61875	63250	64625	66000	68750	
130 48620	50050	51480	52910	54340	55770	57200	58630	60060	61490	62920	64350	65780	67210	68640	71500	
135 50490	51975	53460	54945	56430	57915	59400	60885	62370	63855	65340	66825	68310	69795	71280	74250	
140 52360	53900	55440	56980	58520	60060	61600	63140	64680	66220	67760	69300	70840	72380	73920	77000	
145 54230	55825	57420	59015	60610	62205	63800	65395	66990	68585	70180	71775	73370	74965	76560	79750	
150 56100	57750	59400	61050	62700	64350	66000	67650	69300	70950	72600	74250	75900	77550	79200	82500	
155 57970	59675	61380	63085	64790	66495	68200	69905	71610	73315	75020	76725	78430	80135	81840	85250	
160 59840	61600	63360	65120	66880	68640	70400	72160	73920	75680	77440	79200	80960	82720	84480	88000	
165 61710	63525	65340	67155	68970	70785	72600	74415	76230	78045	79860	81675	83490	85305	87120	90750	
170 63580	65450	67320	69190	71060	72930	74800	76670	78540	80410	82280	84150	86020	87890	89760	93500	
175 65450	67375	69300	71225	73150	75075	77000	78925	80850	82775	84700	86625	88550	90475	92400	96250	
180 67320	69300	71280	73260	75240	77220	79200	81180	83160	85140	87120	89100	91080	93060	95040	99000	
185 69190	71225	73260	75205	77230	79265	81300	83335	85370	87505	89540	91575	93610	95645	97680	101750	
190 71060	73150	75240	77330	79420	81510	83600	85690	87780	89870	91960	94050	96140	98230	100320	104500	
195 72930	75075	77220	79365	81510	83655	85800	87945	90090	92235	94380	96525	98670	100815	102960	107250	
200 74800	77000	79200	81400	83600	85800	88000	90200	92400	94600	96800	99000	101200	103400	105600	110000	

1 1 1/2 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2
3	104																			
3 1/2	121	141																		
4	138	161	184																	
4 1/2	155	181	207	233																
5	173	201	230	259	288															
5 1/2	190	221	253	285	316	348														
6	207	242	276	311	345	380	414													
6 1/2	224	262	299	336	374	411	449	486												
7	242	282	322	362	403	443	483	523	564											
7 1/2	259	302	345	388	431	474	518	561	604	647										
8	276	322	368	414	460	506	552	598	644	690	736									
8 1/2	293	342	391	440	489	538	587	635	684	733	782	831								
9	311	362	414	466	518	569	621	673	725	776	828	880	932							
9 1/2	328	382	437	492	546	601	656	710	763	819	874	929	983	1038						
10	345	403	460	518	575	633	690	748	805	863	920	978	1035	1093	1150					
10 1/2	362	423	483	543	604	664	725	785	845	906	966	1026	1087	1147	1208	1268				
11	380	443	506	569	633	696	759	822	886	949	1012	1075	1139	1202	1265	1328	1392			
11 1/2	397	463	529	595	661	727	794	860	926	992	1058	1124	1190	1256	1323	1389	1455	1521		
12	414	483	552	621	690	759	828	897	966	1035	1104	1173	1242	1311	1380	1449	1518	1587	1656	
12 1/2	431	503	575	647	719	791	863	934	1006	1078	1150	1222	1294	1366	1438	1509	1581	1653	1725	1797
13	449	523	598	673	748	822	897	972	1047	1121	1196	1271	1346	1420	1495	1570	1645	1719	1794	1869
13 1/2	466	543	621	699	776	854	932	1009	1087	1164	1242	1320	1397	1475	1553	1630	1708	1785	1863	1941
14	483	564	644	725	805	886	966	1046	1127	1208	1288	1369	1449	1530	1610	1691	1771	1852	1932	2013
14 1/2	500	584	667	750	834	917	1001	1084	1167	1251	1334	1417	1501	1584	1668	1751	1834	1918	2001	2084
15	518	604	690	776	863	949	1035	1121	1208	1294	1380	1466	1553	1639	1725	1811	1898	1984	2070	2156
15 1/2	535	624	713	802	891	980	1070	1159	1248	1337	1426	1515	1604	1693	1783	1872	1961	2050	2139	2228
16	552	644	736	828	920	1012	1104	1196	1288	1380	1472	1564	1656	1748	1840	1932	2024	2116	2208	2300
16 1/2	569	664	759	854	949	1044	1139	1233	1328	1423	1518	1613	1708	1803	1898	1992	2087	2182	2277	2372
17	587	684	782	880	978	1075	1173	1271	1369	1466	1564	1662	1760	1857	1955	2053	2151	2248	2346	2444
17 1/2	604	704	805	906	1006	1107	1208	1308	1409	1509	1610	1711	1811	1912	2013	2113	2214	2314	2415	2516
18	621	725	832	932	1035	1139	1242	1346	1449	1553	1656	1760	1863	1967	2070	2174	2277	2381	2484	2588
18 1/2	638	745	851	957	1064	1170	1277	1383	1489	1596	1702	1808	1915	2021	2128	2234	2340	2447	2553	2659
19	656	765	874	983	1093	1202	1311	1420	1530	1639	1748	1857	1967	2076	2185	2294	2404	2513	2622	2731
19 1/2	673	785	897	1009	1121	1233	1346	1458	1570	1682	1794	1906	2018	2130	2242	2355	2467	2579	2691	2803
20	690	805	920	1035	1150	1265	1380	1495	1610	1725	1840	1955	2070	2185	2300	2415	2530	2645	2760	2875
21	725	845	966	1087	1208	1328	1449	1570	1691	1811	1932	2053	2174	2294	2415	2536	2657	2777	2898	3019
22	759	886	1012	1139	1265	1392	1518	1645	1771	1898	2024	2151	2277	2404	2530	2657	2783	2910	3036	3163
23	794	926	1058	1190	1323	1455	1587	1719	1852	1984	2116	2248	2381	2513	2645	2777	2910	3042	3174	3306
24	828	966	1104	1242	1380	1518	1656	1794	1932	2070	2208	2346	2484	2622	2760	2898	3036	3174	3312	3450
25	863	1006	1150	1294	1438	1581	1725	1869	2013	2156	2300	2444	2588	2731	2875	3019	3163	3306	3450	3594
26	897	1047	1196	1346	1495	1645	1794	1944	2093	2243	2392	2542	2691	2841	2990	3140	3289	3439	3588	3738
27	932	1087	1242	1397	1553	1708	1863	2018	2174	2329	2484	2639	2795	2950	3105	3260	3416	3571	3726	3881
28	966	1127	1288	1449	1610	1771	1932	2093	2254	2415	2576	2737	2898	3059	3220	3381	3542	3703	3864	4025
29	1001	1167	1334	1501	1668	1834	2001	2168	2335	2501	2668	2835	3002	3168	3335	3502	3669	3835	4002	4169
30	1035	1208	1380	1553	1725	1898	2070	2243	2415	2588	2760	2933	3105	3278	3450	3623	3795	3968	4140	4313
31	1070	1248	1426	1604	1783	1961	2139	2317	2496	2674	2852	3030	3209	3387	3565	3743	3922	4100	4278	4456
32	1104	1288	1472	1656	1840	2024	2208	2392	2576	2760	2944	3128	3312	3496	3680	3864	4048	4232	4416	4600
33	1139	1328	1518	1708	1898	2087	2277	2467	2657	2846	3036	3226	3416	3605	3795	3985	4175	4364	4554	4744
34	1173	1369	1564	1760	1955	2151	2346	2542	2737	2933	3128	3324	3519	3715	3910	4106	4301	4497	4692	4888
35	1208	1409	1610	1811	2013	2214	2415	2616	2818	3019	3220	3421	3623	3824	4025	4226	4428	4629	4830	5031
36	1242	1449	1656	1863	2070	2277	2484	2691	2898	3105	3312	3519	3726	3933	4140	4347	4554	4761	4968	5175
37	1277	1489	1702	1915	2128	2340	2553	2766	2979	3191	3404	3617	3830	4042	4255	4468	4681	4893	5106	5319
38	1311	1530	1748	1967	2185	2404	2622	2841	3059	3278	3496	3715	3933	4152	4370	4589	4807	5026	5244	5463
39	1346	1570	1794	2018	2243	2467	2691	2915	3140	3364	3588	3812	4037	4261	4485	4709	4934	5158	5382	5606
40	1380	1610	1840	2070	2300	2530	2760	2990	3220	3450	3680	3910	4140	4370	4600	4830	5060	5290	5520	5750
41	1415	1650	1886	2122	2358	2593	2829	3065	3301	3536	3772	4008	4244	4479	4715	4951	5187	5422	5658	5894
42	1449	1691	1932	2174	2415	2657	2898	3140	3381	3623	3864	4106	4347	4589	4830	5072	5313	5555	5796	6038
43	1484	1731	1978	2225	2473	2720	2967	3214	3462	3709	3956	4203	4451	4698	4945	5192	5440	5687	5934	6181
44	1518	1771	2024	2277	2530	2783	3036	3289	3542	3795	4048	4301	4554	4807	5060	5313	5566	5819	6072	6325
45	1553	1811	2070	2329	2588	2846	3105	3364	3623	3881	4140	4399	4658	4916	5175	5434	5693	5951	6210	6469
46	1587	1852	2116	2381	2645	2910	3174	3439	3703	3968	4232	4497	4761	5026	5290	5555	5819	6084	6348	6613
47	1622	1892	2162	2432	2703	2973	3243	3513	3784	4054	4324	4594	4865	5135	5405	5675	5946	6216	6486	6756
48	1656	1932	2208	2484	2760	3036	3312	3588	3864	4140	4416	4692	4968	5244	5520	5796	6072	6348	6624	6900
49	1691	1972	2254	2535	2818	3099	3381	3663	3945	4226	4508	4790	5072	5353	5635	5917	6199	6480	6762	7044
50	1725	2013	2300	2588	2875	3163	3450	3738	4025	4313	4600	4888	5175	5463	5750	6038	6325	6613	6900	7188

SMALLER HAVING CEILINGS 11½ FT. HIGH. 11½

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	1944																	
13½	2018	2096																
14	2093	2174	2254															
14½	2168	2251	2335	2418														
15	2243	2329	2415	2501	2588													
15½	2317	2406	2496	2585	2674	2763												
16	2392	2484	2576	2668	2760	2852	2944											
16½	2467	2562	2657	2751	2846	2941	3036	3131										
17	2542	2640	2737	2835	2933	3030	3128	3226	3324									
17½	2616	2717	2818	2918	3019	3119	3220	3321	3421	3522								
18	2691	2795	2898	3002	3105	3209	3312	3416	3519	3623	3726							
18½	2766	2872	2979	3085	3191	3298	3404	3510	3617	3723	3830							
19	2841	2950	3059	3168	3278	3387	3496	3605	3715	3824	3933	4152						
19½	2915	3027	3140	3252	3364	3476	3588	3700	3812	3924	4037	4261						
20	2990	3105	3220	3335	3450	3565	3680	3795	3910	4025	4140	4370	4600					
21	3140	3260	3381	3502	3623	3743	3864	3985	4106	4226	4347	4589	4830	5072				
22	3289	3416	3542	3669	3795	3922	4048	4175	4301	4428	4554	4807	5060	5313	5566			
23	3439	3571	3703	3835	3968	4100	4232	4364	4497	4629	4761	5026	5290	5555	5819	6084		
24	3588	3726	3864	4002	4140	4278	4416	4554	4692	4830	4968	5244	5520	5796	6072	6348	6624	
25	3738	3881	4025	4169	4313	4456	4600	4744	4888	5031	5175	5463	5750	6038	6325	6613	6900	7188
26	3887	4037	4186	4336	4485	4635	4784	4934	5083	5233	5382	5681	5980	6279	6578	6877	7176	7475
27	4037	4192	4347	4502	4658	4813	4968	5123	5279	5434	5589	5900	6210	6521	6831	7142	7452	7763
28	4186	4347	4508	4669	4830	4991	5152	5313	5474	5635	5796	6118	6440	6762	7084	7406	7728	8050
29	4336	4502	4669	4836	5003	5169	5336	5503	5670	5836	6003	6337	6670	7004	7337	7671	8004	8338
30	4485	4658	4830	5003	5175	5348	5520	5693	5865	6038	6210	6555	6900	7245	7590	7935	8280	8625
31	4635	4813	4991	5169	5348	5526	5704	5882	6061	6239	6417	6774	7130	7487	7843	8200	8556	8913
32	4784	4968	5152	5336	5520	5704	5888	6072	6256	6440	6624	6992	7360	7728	8096	8464	8832	9200
33	4934	5123	5313	5503	5693	5882	6072	6262	6452	6641	6831	7211	7590	7970	8349	8729	9108	9488
34	5083	5279	5474	5670	5865	6061	6256	6452	6647	6843	7038	7429	7820	8211	8602	8993	9384	9775
35	5233	5434	5635	5836	6038	6239	6440	6641	6843	7044	7245	7648	8050	8453	8855	9258	9660	10063
36	5382	5589	5796	6003	6210	6417	6624	6831	7038	7245	7452	7866	8280	8694	9108	9522	9936	10350
37	5532	5744	5957	6170	6383	6595	6808	7021	7234	7446	7659	8085	8510	8936	9361	9787	10212	10638
38	5681	5900	6118	6337	6555	6774	6992	7211	7429	7648	7866	8303	8740	9177	9614	10051	10488	10925
39	5831	6055	6279	6503	6728	6952	7176	7400	7625	7849	8073	8522	8970	9419	9867	10316	10764	11213
40	5980	6210	6440	6670	6900	7130	7360	7590	7820	8050	8280	8740	9200	9660	10120	10580	11040	11500
41	6130	6365	6601	6836	7073	7308	7544	7780	8016	8251	8487	8959	9430	9902	10373	10845	11316	11788
42	6279	6521	6762	7004	7245	7487	7728	7970	8211	8453	8694	9177	9660	10143	10626	11109	11592	12075
43	6429	6676	6923	7170	7418	7665	7912	8159	8407	8654	8901	9396	9890	10385	10879	11374	11868	12363
44	6578	6831	7084	7337	7590	7843	8096	8349	8602	8855	9108	9614	10120	10626	11132	11638	12144	12650
45	6728	6986	7245	7504	7763	8021	8280	8539	8798	9056	9315	9833	10350	10868	11385	11903	12420	12938
46	6877	7142	7406	7671	7935	8200	8464	8729	8993	9258	9522	10051	10580	11109	11638	12167	12696	13225
47	7027	7297	7567	7837	8108	8378	8648	8918	9189	9459	9729	10270	10810	11351	11891	12432	12972	13513
48	7176	7452	7728	8004	8280	8556	8832	9108	9384	9660	9936	10488	11040	11592	12144	12696	13248	13800
49	7326	7607	7889	8171	8453	8734	9016	9298	9580	9861	10143	10707	11270	11834	12397	12961	13524	14088
50	7475	7763	8050	8338	8625	8913	9200	9488	9775	10063	10350	10925	11500	12075	12650	13225	13800	14375

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	108																			
3½	126	147																		
4	144	168	192																	
4½	162	189	216	243																
5	180	210	240	270	300															
5½	198	231	264	297	330	363														
6	216	252	288	324	360	396	432													
6½	234	273	312	351	390	429	468	507												
7	252	294	336	378	420	462	504	546	588											
7½	270	315	360	405	450	495	540	585	630	675										
8	288	336	384	432	480	528	576	624	672	720	768									
8½	306	357	408	459	510	561	612	663	714	765	816	867								
9	324	378	432	486	540	594	648	702	756	810	864	918	972							
9½	342	399	456	513	570	627	684	741	798	855	912	969	1026	1083						
10	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200					
10½	378	441	504	567	630	693	756	819	882	945	1008	1071	1134	1197	1260	1323				
11	396	462	528	594	660	726	792	858	924	990	1056	1122	1188	1254	1320	1386	1452			
11½	414	483	552	621	690	759	828	897	966	1035	1104	1173	1242	1311	1380	1449	1518	1587		
12	432	504	576	648	720	792	864	936	1008	1080	1152	1224	1296	1368	1440	1512	1584	1656	1728	
12½	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	1575	1650	1725	1800	1875
13	468	546	624	702	780	858	936	1014	1092	1170	1248	1326	1404	1482	1560	1638	1716	1794	1872	1950
13½	486	567	648	729	810	891	972	1053	1134	1215	1296	1377	1458	1539	1620	1701	1782	1863	1944	2025
14	504	588	672	756	840	924	1008	1092	1176	1260	1344	1428	1512	1596	1680	1764	1848	1932	2016	2100
14½	522	609	696	783	870	957	1044	1131	1218	1305	1392	1479	1566	1653	1740	1827	1914	2001	2088	2175
15	540	630	720	810	900	990	1080	1170	1260	1350	1440	1530	1620	1710	1800	1890	1980	2070	2160	2250
15½	558	651	744	837	930	1023	1116	1209	1302	1395	1488	1581	1674	1767	1860	1953	2046	2139	2232	2325
16	576	672	768	864	960	1056	1152	1248	1344	1440	1536	1632	1728	1824	1920	2016	2112	2208	2304	2400
16½	594	693	792	891	990	1089	1188	1287	1386	1485	1584	1683	1782	1881	1980	2079	2178	2277	2376	2475
17	612	714	816	918	1020	1122	1224	1326	1428	1530	1632	1734	1836	1938	2040	2142	2244	2346	2448	2550
17½	630	735	840	945	1050	1155	1260	1365	1470	1575	1680	1785	1890	1995	2100	2205	2310	2415	2520	2625
18	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	2700
18½	666	777	888	999	1110	1221	1332	1443	1554	1665	1776	1887	1998	2109	2220	2331	2442	2553	2664	2775
19	684	795	912	1026	1140	1254	1368	1482	1596	1710	1824	1938	2052	2166	2280	2394	2508	2622	2736	2850
19½	702	819	936	1053	1170	1287	1404	1521	1638	1755	1872	1989	2106	2223	2340	2457	2574	2691	2808	2925
20	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520	2640	2760	2880	3000
21	736	864	996	1128	1260	1392	1524	1656	1788	1920	2052	2184	2316	2448	2580	2712	2844	2976	3108	3240
22	752	888	1024	1160	1300	1440	1580	1720	1860	2000	2140	2280	2420	2560	2700	2840	2980	3120	3260	3400
23	768	912	1056	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3150	3300	3450	3600
24	784	936	1088	1240	1400	1560	1720	1880	2040	2200	2360	2520	2680	2840	3000	3160	3320	3480	3640	3800
25	800	960	1120	1280	1450	1620	1790	1960	2130	2300	2470	2640	2810	2980	3150	3320	3490	3660	3830	4000
26	816	984	1152	1320	1500	1680	1860	2040	2220	2400	2580	2760	2940	3120	3300	3480	3660	3840	4020	4200
27	832	1008	1184	1360	1550	1740	1930	2120	2310	2500	2690	2880	3070	3260	3450	3640	3830	4020	4210	4400
28	848	1032	1216	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600
29	864	1056	1248	1440	1650	1860	2070	2280	2490	2700	2910	3120	3330	3540	3750	3960	4170	4380	4590	4800
30	880	1080	1280	1480	1690	1900	2110	2320	2530	2740	2950	3160	3370	3580	3790	4000	4210	4420	4630	4840
31	896	1104	1312	1520	1740	1960	2180	2400	2620	2840	3060	3280	3500	3720	3940	4160	4380	4600	4820	5040
32	912	1128	1344	1560	1790	2020	2250	2480	2710	2940	3170	3400	3630	3860	4090	4320	4550	4780	5010	5240
33	928	1152	1376	1600	1840	2080	2320	2560	2800	3040	3280	3520	3760	4000	4240	4480	4720	4960	5200	5440
34	944	1176	1408	1650	1900	2150	2400	2650	2900	3150	3400	3650	3900	4150	4400	4650	4900	5150	5400	5650
35	960	1200	1440	1700	1960	2220	2480	2740	3000	3260	3520	3780	4040	4300	4560	4820	5080	5340	5600	5860
36	976	1224	1464	1720	1980	2240	2500	2760	3020	3280	3540	3800	4060	4320	4580	4840	5100	5360	5620	5880
37	992	1248	1488	1740	2010	2280	2540	2800	3060	3320	3580	3840	4100	4360	4620	4880	5140	5400	5660	5920
38	1008	1272	1512	1760	2040	2320	2600	2880	3160	3440	3720	4000	4280	4560	4840	5120	5400	5680	5960	6240
39	1024	1296	1536	1780	2070	2360	2660	2960	3260	3560	3860	4160	4460	4760	5060	5360	5660	5960	6260	6560
40	1040	1320	1560	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300	6600
41	1056	1344	1584	1820	2130	2440	2740	3040	3340	3640	3940	4240	4540	4840	5140	5440	5740	6040	6340	6640
42	1072	1368	1608	1840	2160	2480	2800	3120	3440	3760	4080	4400	4720	5040	5360	5680	6000	6320	6640	6960
43	1088	1392	1632	1860	2190	2520	2840	3160	3480	3800	4120	4440	4760	5080	5400	5720	6040	6360	6680	7000
44	1104	1416	1656	1880	2220	2560	2900	3240	3580	3920	4260	4600	4940	5280	5620	5960	6300	6640	6980	7320
45	1120	1440	1680	1900	2250	2600	2950	3300	3650	4000	4350	4700	5050	5400	5750	6100	6450	6800	7150	7500
46	1136	1464	1704	1920	2280	2640	3000	3360	3720	4080	4440	4800	5160	5520	5880	6240	6600	6960	7320	7680
47	1152	1488	1728	1940	2310	2680	3060	3420	3780	4140	4500	4860	5220	5580	5940	6300	6660	7020	7380	7740
48	1168	1512	1752	1960	2340	2720	3100	3460	3820	4180	4540	4900	5260	5620	5980	6340	6700	7060	7420	7780
49	1184	1536	1776	1980	2370	2760	3140	3500	3860	4220	4580	4940	5300	5660	6020	6380	6740	7100	7460	7820
50	1200	1560	1800	2000	2400	2800	3200	3600	4000	4400	4800	5200	5600	6000	6400	6800	7200	7600	8000	8400

ALWAYS USE SMALLEST NUMBER AT TOP AND LARGEST AT SIDE.

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	2028																	
13½	2106	2187																
14	2184	2268	2352															
14½	2262	2349	2436	2523														
15	2340	2430	2520	2610	2700													
15½	2418	2511	2604	2697	2790	2883												
16	2496	2592	2688	2784	2880	2976	3072											
16½	2574	2673	2772	2871	2970	3069	3168	3267										
17	2652	2754	2856	2958	3060	3162	3264	3366	3468									
17½	2730	2835	2940	3045	3150	3255	3360	3465	3570	3675								
18	2808	2916	3024	3132	3240	3348	3456	3564	3672	3780	3888							
18½	2886	2997	3108	3219	3330	3441	3552	3663	3774	3885	3996							
19	2964	3078	3192	3306	3420	3534	3648	3762	3876	3990	4104	4332						
19½	3042	3159	3276	3393	3510	3627	3744	3861	3978	4095	4212	4446						
20	3120	3240	3360	3480	3600	3720	3840	3960	4080	4200	4320	4560	4800					
21	3276	3402	3528	3654	3780	3906	4032	4158	4284	4410	4536	4788	5040	5292				
22	3432	3564	3696	3828	3960	4092	4224	4356	4488	4620	4752	5016	5280	5544	5808			
23	3588	3726	3864	4002	4140	4278	4416	4554	4692	4830	4968	5244	5520	5796	6072	6348		
24	3744	3888	4032	4176	4320	4464	4608	4752	4896	5040	5184	5472	5760	6048	6336	6624	6912	
25	3900	4050	4200	4350	4500	4650	4800	4950	5100	5250	5400	5700	6000	6300	6600	6900	7200	7500
26	4056	4212	4368	4524	4680	4836	4992	5148	5304	5460	5616	5928	6240	6552	6864	7176	7488	7800
27	4212	4374	4536	4698	4860	5022	5184	5346	5508	5670	5832	6156	6480	6804	7128	7452	7776	8100
28	4368	4536	4704	4872	5040	5208	5376	5544	5712	5880	6048	6384	6720	7056	7392	7728	8064	8400
29	4524	4698	4872	5046	5220	5394	5568	5742	5916	6090	6264	6612	6960	7308	7656	8004	8352	8700
30	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6840	7200	7560	7920	8280	8640	9000
31	4836	5022	5208	5394	5580	5766	5952	6138	6324	6510	6696	7068	7440	7812	8184	8556	8928	9300
32	4992	5184	5376	5568	5760	5952	6144	6336	6528	6720	6912	7296	7680	8064	8448	8832	9216	9600
33	5148	5346	5544	5742	5940	6138	6336	6534	6732	6930	7128	7524	7920	8316	8712	9108	9504	9900
34	5304	5508	5712	5916	6120	6324	6528	6732	6936	7140	7344	7752	8160	8568	8976	9384	9792	10200
35	5460	5670	5880	6090	6300	6510	6720	6930	7140	7350	7560	7980	8400	8820	9240	9660	10080	10500
36	5616	5832	6048	6264	6480	6696	6912	7128	7344	7560	7776	8208	8640	9072	9504	9936	10368	10800
37	5772	5994	6216	6438	6660	6882	7104	7326	7548	7770	7992	8436	8880	9324	9768	10212	10656	11100
38	5928	6156	6384	6612	6840	7068	7296	7524	7752	7980	8208	8664	9120	9576	10032	10488	10944	11400
39	6084	6318	6552	6786	7020	7254	7488	7722	7956	8190	8424	8892	9360	9828	10296	10764	11232	11700
40	6240	6480	6720	6960	7200	7440	7680	7920	8160	8400	8640	9120	9600	10080	10560	11040	11520	12000
41	6396	6642	6888	7134	7380	7626	7872	8118	8364	8610	8856	9348	9840	10332	10824	11316	11808	12300
42	6552	6804	7056	7308	7560	7812	8064	8316	8568	8820	9072	9576	10080	10584	11088	11592	12096	12600
43	6708	6966	7224	7482	7740	7998	8256	8514	8772	9030	9288	9804	10320	10836	11352	11868	12384	12900
44	6864	7128	7392	7656	7920	8184	8448	8712	8976	9240	9504	10032	10560	11088	11616	12144	12672	13200
45	7020	7290	7560	7830	8100	8370	8640	8910	9180	9450	9720	10260	10800	11340	11880	12420	12960	13500
46	7176	7452	7728	8004	8280	8556	8832	9108	9384	9660	9936	10488	11040	11592	12144	12696	13248	13800
47	7332	7614	7896	8178	8460	8742	9024	9306	9588	9870	10152	10716	11280	11844	12408	12972	13536	14100
48	7488	7776	8064	8352	8640	8928	9216	9504	9792	10080	10368	10944	11520	12096	12672	13248	13824	14400
49	7644	7938	8232	8526	8820	9114	9408	9702	9996	10290	10584	11172	11760	12348	12936	13524	14112	14700
50	7800	8100	8400	8700	9000	9300	9600	9900	10200	10500	10800	11400	12000	12600	13200	13800	14400	15000

WHEN THE EXACT SIZE IS NOT GIVEN USE THE NEXT LARGER.

12 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	5400	5700	6000	6300	6600	6900	7200	7500								
26	5616	5928	6240	6552	6864	7176	7488	7800	8112							
27	5832	6156	6480	6804	7128	7452	7776	8100	8424	8748						
28	6048	6384	6720	7056	7392	7728	8064	8400	8736	9072	9408					
29	6264	6612	6960	7308	7656	8004	8352	8700	9048	9396	9744	10092				
30	6480	6840	7200	7560	7920	8280	8640	9000	9360	9720	10080	10440	10800			
31	6696	7068	7440	7812	8184	8556	8928	9300	9672	10044	10416	10788	11160	11532		
32	6912	7296	7680	8064	8448	8832	9216	9600	9984	10368	10752	11136	11520	11904	12288	
33	7128	7524	7920	8316	8712	9108	9504	9900	10296	10692	11088	11484	11880	12276	12672	13068
34	7344	7752	8160	8568	8976	9384	9792	10200	10608	11016	11424	11832	12240	12648	13056	13464
35	7560	7980	8400	8820	9240	9660	10080	10500	10920	11340	11760	12180	12600	13020	13440	13860
36	7776	8208	8640	9072	9504	9936	10368	10800	11232	11664	12096	12528	12960	13392	13824	14256
37	7992	8436	8880	9324	9768	10212	10656	11100	11544	11988	12432	12876	13320	13764	14208	14652
38	8208	8664	9120	9576	10032	10488	10944	11400	11856	12312	12768	13224	13680	14136	14592	15048
39	8424	8892	9360	9828	10296	10764	11232	11700	12168	12636	13104	13572	14040	14508	14976	15444
40	8640	9120	9600	10080	10560	11040	11520	12000	12480	12960	13440	13920	14400	14880	15360	15840
41	8856	9348	9840	10332	10824	11316	11808	12300	12792	13284	13776	14268	14760	15252	15744	16236
42	9072	9576	10080	10584	11088	11592	12096	12600	13104	13608	14112	14616	15120	15624	16128	16632
43	9288	9804	10320	10836	11352	11868	12384	12900	13416	13932	14448	14964	15480	15996	16512	17028
44	9504	10032	10560	11088	11616	12144	12672	13200	13728	14256	14784	15312	15840	16368	16896	17424
45	9720	10260	10800	11340	11880	12420	12960	13500	14040	14580	15120	15660	16200	16740	17280	17820
46	9936	10488	11040	11592	12144	12696	13248	13800	14352	14904	15456	16008	16560	17112	17664	18216
47	10152	10716	11280	11844	12408	12972	13536	14100	14664	15228	15792	16356	16920	17484	18048	18612
48	10368	10944	11520	12096	12672	13248	13824	14400	14976	15552	16128	16704	17280	17856	18432	19008
49	10584	11172	11760	12348	12936	13524	14112	14700	15288	15876	16464	17052	17640	18228	18816	19404
50	10800	11400	12000	12600	13200	13800	14400	15000	15600	16200	16800	17400	18000	18600	19200	19800
52	11232	11856	12480	13104	13728	14352	14976	15600	16224	16848	17472	18096	18720	19344	19968	20592
54	11664	12312	12960	13608	14256	14904	15552	16200	16848	17496	18144	18792	19440	20088	20736	21384
56	12096	12768	13440	14112	14784	15456	16128	16800	17472	18144	18816	19488	20160	20832	21504	22176
58	12528	13224	13920	14616	15312	16008	16704	17400	18096	18792	19488	20184	20880	21576	22272	22968
60	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
62	13392	14136	14880	15624	16368	17112	17856	18600	19344	20088	20832	21576	22320	23064	23808	24552
64	13824	14592	15360	16128	16896	17664	18432	19200	19968	20736	21504	22272	23040	23808	24576	25344
66	14256	15048	15840	16632	17424	18216	19008	19800	20592	21384	22176	22968	23760	24552	25344	26136
68	14688	15504	16320	17136	17952	18768	19584	20400	21216	22032	22848	23664	24480	25296	26112	26928
70	15120	15960	16800	17640	18480	19320	20160	21000	21840	22680	23520	24360	25200	26040	26880	27720
72	15552	16416	17280	18144	19008	19872	20736	21600	22464	23328	24192	25056	25920	26784	27648	28512
74	15984	16872	17760	18648	19536	20424	21312	22200	23088	23976	24864	25752	26640	27528	28416	29304
76	16416	17328	18240	19152	20064	20976	21888	22800	23712	24624	25536	26448	27360	28272	29184	30096
78	16848	17784	18720	19656	20592	21528	22464	23400	24336	25272	26208	27144	28080	29016	29952	30888
80	17280	18240	19200	20160	21120	22080	23040	24000	24960	25920	26880	27840	28800	29760	30720	31680
85	18360	19380	20400	21420	22440	23460	24480	25500	26520	27540	28560	29580	30600	31620	32640	33660
90	19440	20520	21600	22680	23760	24840	25920	27000	28080	29160	30240	31320	32400	33480	34560	35640
95	20520	21660	22800	23940	25080	26220	27360	28500	29640	30780	31920	33060	34200	35340	36480	37620
100	21600	22800	24000	25200	26400	27600	28800	30000	31200	32400	33600	34800	36000	37200	38400	39600
105	22680	23940	25200	26460	27720	28980	30240	31500	32760	34020	35280	36540	37800	39060	40320	41580
110	23760	25080	26400	27720	29040	30360	31680	33000	34320	35640	36960	38280	39600	40920	42240	43560
115	24840	26220	27600	28980	30360	31740	33120	34500	35880	37260	38640	40020	41400	42780	44160	45540
120	25920	27360	28800	30240	31680	33120	34560	36000	37440	38880	40320	41760	43200	44640	46080	47520
125	27000	28500	30000	31500	33000	34500	36000	37500	39000	40500	42000	43500	45000	46500	48000	49500
130	28080	29640	31200	32760	34320	35880	37440	39000	40560	42120	43680	45240	46800	48360	49920	51480
135	29160	30780	32400	34020	35640	37260	38880	40500	42120	43740	45360	46980	48600	50220	51840	53460
140	30240	31920	33600	35280	36960	38640	40320	42000	43680	45360	47040	48720	50400	52080	53760	55440
145	31320	33060	34800	36540	38280	40020	41760	43500	45240	46980	48720	50460	52200	53940	55680	57420
150	32400	34200	36000	37800	39600	41400	43200	45000	46800	48600	50400	52200	54000	55800	57600	59400
155	33480	35340	37200	39060	40920	42780	44640	46500	48360	50220	52080	53940	55800	57660	59520	61380
160	34560	36480	38400	40320	42240	44160	46080	48000	49920	51840	53760	55680	57600	59520	61440	63360
165	35640	37620	39600	41580	43560	45540	47520	49500	51480	53460	55440	57420	59400	61380	63360	65340
170	36720	38760	40800	42840	44880	46920	48960	51000	53040	55080	57120	59160	61200	63240	65280	67320
175	37800	39900	42000	44100	46200	48300	50400	52500	54600	56700	58800	60900	63000	65100	67200	69300
180	38880	41040	43200	45360	47520	49680	51840	54000	56160	58320	60480	62640	64800	66960	69120	71280
185	39960	42180	44400	46620	48840	51060	53280	55500	57720	59940	62160	64380	66600	68820	71040	73260
190	41040	43320	45600	47880	50160	52440	54720	57000	59280	61560	63840	66120	68400	70680	72960	75240
195	42120	44460	46800	49140	51480	53840	56160	58500	60840	63180	65520	67860	70200	72540	74880	77220
200	43200	45600	48000	50400	52800	55200	57600	60000	62400	64800	67200	69600	72000	74400	76800	79200

	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	50
34	13872															
35	14280	14700														
36	14688	15120	15552													
37	15096	15540	15984	16428												
38	15504	15960	16416	16872	17328											
39	15912	16380	16848	17316	17784	18252										
40	16320	16800	17280	17760	18240	18720	19200									
41	16728	17220	17712	18204	18696	19188	19680	20172								
42	17136	17640	18144	18648	19152	19656	20160	20664	21168							
43	17544	18060	18576	19092	19608	20124	20640	21156	21672	22188						
44	17952	18480	19008	19536	20064	20592	21120	21648	22176	22704	23232					
45	18360	18900	19440	19980	20520	21060	21600	22140	22680	23220	23760	24300				
46	18768	19320	19872	20424	20976	21528	22080	22632	23184	23736	24288	24840	25392			
47	19176	19740	20304	20868	21432	21996	22560	23124	23688	24252	24816	25380	25944	26508		
48	19584	20160	20736	21312	21888	22464	23040	23616	24192	24768	25344	25920	26496	27072	27648	
49	19992	20580	21168	21756	22344	22932	23520	24108	24696	25284	25872	26460	27048	27636	28224	29400
50	20400	21000	21600	22200	22800	23400	24000	24600	25200	25800	26400	27000	27600	28200	28800	30000
52	21216	21840	22464	23088	23712	24336	24960	25584	26208	26832	27456	28080	28704	29328	29952	31200
54	22032	22680	23328	23976	24624	25272	25920	26568	27216	27864	28512	29160	29808	30456	31104	32400
56	22848	23520	24192	24864	25536	26208	26880	27552	28224	28896	29568	30240	30912	31584	32256	33600
58	23664	24360	25056	25752	26448	27144	27840	28536	29232	29928	30624	31320	32016	32712	33408	34800
60	24480	25200	25920	26640	27360	28080	28800	29520	30240	30960	31680	32400	33120	33840	34560	36000
62	25296	26040	26784	27528	28272	29016	29760	30504	31248	31992	32736	33480	34224	34968	35712	37200
64	26112	26880	27648	28416	29184	29952	30720	31488	32256	33024	33792	34560	35328	36096	36864	38400
66	26928	27720	28512	29304	30096	30888	31680	32472	33264	34056	34848	35640	36432	37224	38016	39600
68	27744	28560	29376	30192	31008	31824	32640	33456	34272	35088	35904	36720	37536	38352	39168	40800
70	28560	29400	30240	31080	31920	32760	33600	34440	35280	36120	36960	37800	38640	39480	40320	42000
72	29376	30240	31104	31968	32832	33696	34560	35424	36288	37152	38016	38880	39744	40608	41472	43200
74	30192	31080	31968	32856	33744	34632	35520	36408	37296	38184	39072	39960	40848	41736	42624	44400
76	31008	31920	32832	33744	34656	35568	36480	37392	38304	39216	40128	41040	41952	42864	43776	45600
78	31824	32760	33696	34632	35568	36504	37440	38376	39312	40248	41184	42120	43056	43992	44928	46800
80	32640	33600	34560	35520	36480	37440	38400	39360	40320	41280	42240	43200	44160	45120	46080	48000
85	34680	35700	36720	37740	38760	39780	40800	41820	42840	43860	44880	45900	46920	47940	48960	51000
90	36720	37800	38880	39960	41040	42120	43200	44280	45360	46440	47520	48600	49680	50760	51840	54000
95	38760	39900	41040	42180	43320	44460	45600	46740	47880	49020	50160	51300	52440	53580	54720	57000
100	40800	42000	43200	44400	45600	46800	48000	49200	50400	51600	52800	54000	55200	56400	57600	60000
105	42840	44100	45360	46620	47880	49140	50400	51660	52920	54180	55440	56700	57960	59220	60480	63000
110	44880	46200	47520	48840	50160	51480	52800	54120	55440	56760	58080	59400	60720	62040	63360	66000
115	46920	48300	49680	51060	52440	53820	55200	56580	57960	59340	60720	62100	63480	64860	66240	69000
120	48960	50400	51840	53280	54720	56160	57600	59040	60480	61920	63360	64800	66240	67680	69120	72000
125	51000	52500	54000	55500	57000	58500	60000	61500	63000	64500	66000	67500	69000	70500	72000	75000
130	53040	54600	56160	57720	59280	60840	62400	63960	65520	67080	68640	70200	71760	73320	74880	78000
135	55080	56700	58320	59940	61560	63180	64800	66420	68040	69660	71280	72900	74520	76140	77760	81000
140	57120	58800	60480	62160	63840	65520	67200	68880	70560	72240	73920	75600	77280	78960	80640	84000
145	59160	60900	62640	64380	66120	67860	69600	71340	73080	74820	76560	78300	80040	81780	83520	87000
150	61200	63000	64800	66600	68400	70200	72000	73800	75600	77400	79200	81000	82800	84600	86400	90000
155	63240	65100	66960	68820	70680	72540	74400	76260	78120	79980	81840	83700	85560	87420	89280	93000
160	65280	67200	69120	71040	72960	74880	76800	78720	80640	82560	84480	86400	88320	90240	92160	96000
165	67320	69300	71280	73260	75240	77220	79200	81180	83160	85140	87120	89100	91080	93060	95040	99000
170	69360	71400	73440	75480	77520	79560	81600	83640	85680	87720	89760	91800	93840	95880	97920	102000
175	71400	73500	75600	77700	79800	81900	84000	86100	88200	90300	92400	94500	96600	98700	100800	105000
180	73440	75600	77760	79920	82080	84240	86400	88560	90720	92880	95040	97200	99360	101520	103680	108000
185	75480	77700	79920	82140	84360	86580	88800	91020	93240	95460	97680	99900	102120	104340	106560	111000
190	77520	79800	82080	84360	86640	88920	91200	93480	95760	98040	100320	102600	104880	107160	109440	114000
195	79560	81900	84240	86580	88920	91260	93600	95940	98280	100620	102960	105300	107640	109980	112320	117000
200	81600	84000	86400	88800	91200	93600	96000	98400	100800	103200	105600	108000	110400	112800	115200	120000

12 1-2 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	112																			
3½	131	153																		
4	150	175	200																	
4½	168	196	225	253																
5	187	218	250	281	312															
5½	206	240	275	309	343	378														
6	225	262	300	337	375	412	450													
6½	243	284	325	365	406	446	487	528												
7	262	306	350	393	437	481	525	568	612											
7½	281	328	375	421	468	515	562	609	656	703										
8	300	350	400	450	500	550	600	650	700	750	800									
8½	318	371	425	478	531	584	637	690	743	796	840	903								
9	337	393	450	506	562	618	675	731	787	843	900	956	1012							
9½	356	415	475	534	593	653	712	771	831	890	950	1009	1068	1128						
10	375	437	500	562	625	687	750	812	875	937	1000	1062	1125	1187	1250					
10½	393	459	525	590	656	721	787	853	918	984	1050	1115	1181	1246	1312	1378				
11	412	481	550	618	687	756	825	893	962	1031	1100	1168	1237	1306	1375	1443	1512			
11½	431	503	575	646	717	790	862	934	1006	1078	1150	1221	1293	1365	1437	1509	1581	1653		
12	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	1575	1650	1725	1800	
12½	468	546	625	703	781	859	937	1015	1093	1171	1250	1328	1406	1484	1562	1640	1718	1796	1875	1953
13	487	568	650	731	812	893	975	1056	1137	1218	1300	1381	1462	1543	1625	1706	1787	1868	1950	2031
13½	506	590	675	759	843	928	1012	1096	1181	1265	1350	1434	1518	1603	1687	1771	1856	1940	2025	2109
14	525	612	700	787	875	962	1050	1137	1225	1312	1400	1487	1575	1662	1750	1837	1925	2012	2100	2187
14½	543	634	725	815	906	996	1087	1178	1268	1359	1450	1540	1631	1721	1812	1903	1993	2084	2175	2265
15	562	656	750	843	937	1031	1125	1218	1312	1406	1500	1593	1687	1781	1875	1968	2062	2156	2250	2343
15½	581	678	775	871	968	1065	1162	1259	1356	1453	1550	1646	1743	1840	1937	2034	2131	2228	2325	2421
16	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
16½	618	721	825	928	1031	1134	1237	1340	1443	1546	1650	1753	1856	1959	2062	2165	2268	2371	2475	2578
17	637	743	850	956	1062	1168	1275	1381	1487	1593	1700	1806	1912	2018	2125	2231	2337	2443	2550	2656
17½	656	765	875	984	1093	1203	1312	1421	1531	1640	1750	1859	1968	2079	2187	2296	2406	2515	2625	2734
18	675	787	900	1012	1125	1237	1350	1462	1575	1687	1800	1912	2025	2137	2250	2362	2475	2587	2700	2812
18½	693	809	925	1040	1156	1271	1387	1503	1618	1734	1850	1965	2081	2196	2312	2428	2543	2659	2775	2890
19	712	831	950	1068	1187	1306	1425	1543	1662	1781	1900	2018	2137	2256	2375	2493	2612	2731	2850	2968
19½	731	853	975	1096	1218	1340	1462	1584	1706	1828	1950	2071	2193	2315	2437	2559	2681	2803	2925	3046
20	750	875	1000	1125	1250	1375	1500	1625	1750	1875	2000	2125	2250	2375	2500	2625	2750	2875	3000	3125
21	787	918	1050	1181	1312	1443	1575	1706	1837	1968	2100	2231	2362	2493	2625	2756	2887	3018	3150	3281
22	825	962	1100	1237	1375	1512	1650	1787	1925	2062	2200	2337	2475	2612	2750	2887	3025	3162	3300	3437
23	862	1006	1150	1293	1437	1581	1725	1868	2012	2156	2300	2443	2587	2731	2875	3018	3162	3306	3450	3593
24	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3150	3300	3450	3600	3750
25	937	1093	1250	1406	1562	1718	1875	2031	2187	2343	2500	2656	2812	2968	3125	3281	3437	3593	3750	3906
26	975	1137	1300	1462	1625	1787	1950	2112	2275	2437	2600	2762	2925	3087	3250	3412	3575	3737	3900	4062
27	1012	1181	1350	1518	1687	1856	2025	2193	2362	2531	2700	2868	3037	3206	3375	3543	3712	3881	4050	4118
28	1050	1225	1400	1575	1750	1925	2100	2275	2450	2625	2800	2975	3150	3325	3500	3675	3850	4025	4200	4375
29	1087	1268	1450	1631	1812	1993	2175	2356	2537	2718	2900	3081	3262	3443	3625	3806	3987	4168	4350	4531
30	1125	1312	1500	1687	1875	2062	2250	2437	2625	2812	3000	3187	3375	3562	3750	3937	4125	4312	4500	4687
31	1162	1356	1550	1743	1937	2131	2325	2518	2712	2906	3100	3293	3487	3681	3875	4068	4262	4456	4650	4843
32	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
33	1237	1443	1650	1856	2062	2268	2475	2681	2887	3093	3300	3506	3712	3918	4125	4331	4537	4743	4950	5156
34	1275	1487	1700	1912	2125	2336	2550	2762	2975	3187	3400	3612	3826	4037	4250	4462	4675	4887	5100	5312
35	1312	1531	1750	1968	2187	2406	2625	2843	3062	3281	3500	3718	3937	4156	4375	4593	4812	5031	5250	5468
36	1350	1575	1800	2025	2250	2475	2700	2925	3150	3375	3600	3825	4050	4275	4500	4725	4950	5175	5400	5625
37	1387	1618	1850	2081	2312	2543	2775	3006	3237	3468	3700	3931	4162	4393	4625	4856	5087	5318	5550	5781
38	1425	1662	1900	2137	2375	2612	2850	3087	3325	3562	3800	4037	4275	4512	4750	4987	5225	5462	5700	5937
39	1462	1706	1950	2193	2437	2681	2925	3168	3412	3656	3900	4143	4387	4631	4875	5118	5362	5606	5850	6093
40	1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250
41	1537	1793	2050	2306	2562	2818	3075	3331	3587	3843	4100	4356	4612	4868	5125	5381	5637	5893	6150	6406
42	1575	1837	2100	2362	2625	2887	3150	3412	3675	3937	4200	4462	4725	4987	5250	5512	5775	6037	6300	6562
43	1612	1881	2150	2418	2687	2956	3225	3493	3762	4031	4300	4568	4837	5106	5375	5643	5912	6181	6450	6718
44	1650	1925	2200	2475	2750	3025	3300	3575	3850	4125	4400	4675	4950	5225	5500	5775	6050	6325	6600	6875
45	1687	1968	2250	2531	2812	3093	3375	3656	3937	4218	4500	4781	5062	5343	5625	5906	6187	6468	6750	7031
46	1725	2012	2300	2587	2875	3162	3450	3737	4025	4312	4600	4887	5175	5462	5750	6037	6325	6612	6900	7187
47	1762	2056	2350	2643	2937	3231	3525	3818	4112	4406	4700	4993	5287	5581	5875	6168	6462	6756	7050	7343
48	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300	6600	6900	7200	7500
49	1837	2143	2450	2756	3063	3368	3675	3981	4287	4593	4900	5206	5512	5818	6125	6431	6737	7043	7350	7656
50	1875	2187	2500	2812	3125	3437	3750	4062	4375	4687	5000	5312	5625	5937	6250	6562	6875	7187	7500	7812

ALWAYS USE SMALLEST NUMBER AT TOP AND LARGEST AT SIDE

SMALLER HAVING CEILINGS 12 1-2 FT. HIGH. 12 1-2

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	2112																	
13½	2193	2278																
14	2275	2362	2450															
14½	2356	2446	2537	2628														
15	2437	2531	2625	2718	2812													
15½	2518	2615	2712	2809	2906	3003												
16	2600	2700	2800	2900	3000	3100	3200											
16½	2681	2784	2887	2990	3093	3196	3300	3403										
17	2762	2868	2975	3081	3187	3293	3400	3506	3612									
17½	2843	2953	3062	3171	3281	3390	3500	3609	3718	3828								
18	2925	3037	3150	3262	3375	3487	3600	3712	3825	3937	4050							
18½	3006	3121	3237	3353	3468	3584	3700	3815	3931	4046	4162							
19	3087	3206	3325	3443	3562	3681	3800	3918	4037	4156	4275	4512						
19½	3168	3290	3412	3534	3656	3778	3900	4021	4143	4265	4387	4631						
20	3250	3375	3500	3625	3750	3875	4000	4125	4250	4375	4500	4750	5000					
21	3412	3543	3675	3806	3937	4068	4200	4331	4462	4593	4725	4987	5250	5512				
22	3575	3712	3850	3987	4125	4262	4400	4537	4675	4812	4950	5225	5500	5775	6050			
23	3737	3881	4025	4168	4312	4456	4600	4743	4887	5031	5175	5462	5750	6034	6325	6612		
24	3900	4050	4200	4350	4500	4650	4800	4950	5100	5250	5400	5700	6000	6300	6600	6900	7200	
25	4062	4218	4375	4531	4687	4843	5000	5156	5312	5468	5625	5987	6250	6562	6875	7187	7500	7812
26	4225	4387	4550	4712	4875	5037	5200	5362	5525	5687	5850	6175	6500	6825	7150	7475	7800	8125
27	4287	4456	4625	4893	5061	5231	5400	5568	5737	5906	6075	6412	6750	7087	7425	7762	8100	8437
28	4650	4725	4900	5075	5250	5425	5600	5775	5950	6125	6300	6650	7000	7350	7700	8050	8400	8750
29	4712	4893	5075	5256	5437	5618	5800	5981	6162	6343	6525	6887	7250	7612	7975	8337	8700	9062
30	4875	5062	5250	5437	5625	5812	6000	6187	6375	6562	6750	7125	7500	7875	8250	8625	9000	9375
31	5037	5231	5425	5618	5812	6006	6200	6393	6587	6781	6975	7362	7750	8137	8525	8912	9300	9687
32	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000	7200	7600	8000	8400	8800	9200	9600	10000
33	5362	5568	5775	5981	6187	6393	6600	6806	7012	7218	7425	7837	8250	8662	9075	9487	9900	10312
34	5525	5737	5950	6162	6375	6587	6800	7012	7225	7437	7650	8075	8500	8925	9350	9775	10200	10625
35	5687	5906	6125	6343	6562	6781	7000	7218	7437	7656	7875	8312	8750	9187	9625	10062	10500	10937
36	5850	6075	6300	6525	6750	6975	7200	7425	7650	7875	8100	8550	9000	9450	9900	10350	10800	11250
37	6012	6243	6475	6706	6938	7168	7400	7631	7862	8093	8325	8787	9250	9712	10175	10637	11100	11562
38	6175	6412	6650	6887	7125	7362	7600	7837	8075	8312	8550	9025	9500	9975	10450	10925	11400	11875
39	6337	6581	6825	7068	7312	7556	7800	8043	8287	8531	8775	9262	9750	10237	10725	11212	11700	12187
40	6500	6750	7000	7250	7500	7750	8000	8250	8500	8750	9000	9500	10000	10500	11000	11500	12000	12500
41	6662	6918	7175	7431	7687	7943	8200	8456	8722	8968	9225	9737	10250	10762	11275	11787	12300	12812
42	6825	7087	7350	7612	7875	8137	8400	8662	8925	9187	9450	9975	10500	11025	11550	12075	12600	13125
43	6987	7256	7525	7793	8062	8331	8600	8868	9137	9406	9675	10212	10750	11287	11825	12362	12900	13437
44	7150	7425	7700	7975	8250	8525	8800	9075	9350	9625	9900	10450	11000	11550	12100	12650	13200	13750
45	7312	7593	7875	8156	8437	8718	9000	9281	9562	9843	10125	10687	11250	11812	12375	12937	13500	14062
46	7475	7762	8050	8337	8625	8912	9200	9487	9775	10062	10350	10925	11500	12075	12650	13225	13800	14375
47	7637	7931	8225	8518	8812	9106	9400	9693	9987	10281	10575	11162	11750	12337	12925	13512	14100	14687
48	7800	8100	8400	8700	9000	9300	9600	9900	10200	10500	10800	11400	12000	12600	13200	13800	14400	15000
49	7962	8268	8575	8881	9187	9493	9800	10106	10412	10718	11025	11637	12250	12862	13475	14087	14700	15312
50	8125	8437	8750	9062	9375	9687	10000	10312	10625	10937	11250	11875	12500	13125	13750	14375	15000	15625

WHEN THE EXACT SIZE IS NOT GIVEN USE THE NEXT LARGER.

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	117																			
3½	137	159																		
4	156	182	208																	
4½	176	205	234	263																
5	195	228	260	293	325															
5½	215	250	286	322	358	393														
6	234	273	312	351	390	429	468													
6½	254	296	338	380	423	465	507	549												
7	273	319	364	410	455	501	546	592	637											
7½	293	341	390	439	488	536	585	634	683	731										
8	312	364	416	468	520	572	624	676	728	780	832									
8½	332	387	442	497	553	608	663	718	774	829	884	939								
9	351	410	468	527	585	644	702	761	819	878	936	995	1053							
9½	371	432	494	556	618	679	741	803	865	926	988	1050	1112	1173						
10	390	455	520	585	650	715	780	845	910	975	1040	1105	1170	1235	1300					
10½	410	478	546	614	683	751	819	887	956	1024	1092	1161	1229	1297	1365	1433				
11	429	501	572	644	715	787	858	930	1001	1073	1144	1216	1287	1359	1430	1502	1573			
11½	449	523	598	673	748	822	897	972	1047	1121	1196	1271	1346	1420	1495	1570	1645	1719		
12	468	546	624	702	780	858	936	1014	1092	1170	1248	1326	1404	1482	1560	1638	1716	1794	1872	
12½	488	569	650	731	813	894	975	1056	1138	1219	1300	1381	1463	1544	1625	1706	1788	1869	1950	2031
13	507	592	676	761	845	930	1014	1099	1183	1268	1352	1437	1521	1606	1690	1775	1859	1944	2028	2113
13½	527	614	702	790	878	965	1053	1141	1229	1316	1404	1492	1580	1667	1755	1843	1931	2018	2106	2194
14	546	637	728	819	910	1001	1092	1183	1274	1365	1456	1547	1638	1729	1820	1911	2002	2093	2184	2275
14½	566	660	754	848	943	1037	1131	1225	1320	1414	1508	1602	1697	1791	1885	1979	2074	2168	2262	2356
15	585	683	780	878	975	1073	1170	1268	1365	1463	1560	1658	1755	1853	1950	2048	2145	2243	2340	2438
15½	605	705	806	907	1008	1108	1209	1310	1411	1511	1612	1713	1814	1914	2015	2116	2217	2317	2418	2519
16	624	728	832	936	1040	1144	1248	1352	1456	1560	1664	1768	1872	1976	2080	2184	2288	2392	2496	2600
16½	644	751	858	965	1073	1180	1287	1394	1501	1609	1716	1823	1931	2038	2145	2252	2360	2467	2574	2681
17	663	774	884	995	1105	1216	1326	1437	1547	1658	1768	1879	1989	2100	2210	2321	2431	2542	2652	2763
17½	683	796	910	1024	1138	1251	1365	1479	1593	1706	1820	1934	2048	2161	2275	2389	2503	2616	2730	2844
18	702	819	936	1053	1170	1287	1404	1521	1638	1755	1872	1989	2106	2223	2340	2457	2574	2691	2808	2925
18½	722	842	962	1082	1203	1323	1443	1563	1684	1804	1924	2044	2165	2285	2405	2525	2646	2766	2886	3006
19	741	865	988	1112	1235	1359	1482	1606	1729	1853	1976	2100	2223	2347	2470	2594	2717	2841	2964	3088
19½	761	887	1014	1141	1268	1394	1521	1648	1775	1901	2028	2155	2282	2408	2535	2662	2789	2915	3042	3169
20	780	910	1040	1170	1300	1430	1560	1690	1820	1950	2080	2210	2340	2470	2600	2730	2860	2990	3120	3250
21	819	956	1092	1229	1365	1502	1638	1775	1911	2048	2184	2321	2457	2594	2730	2867	3003	3140	3276	3413
22	858	1001	1144	1287	1430	1573	1716	1859	2002	2145	2288	2431	2574	2717	2860	3003	3146	3289	3432	3575
23	897	1047	1196	1346	1495	1645	1794	1944	2093	2243	2392	2542	2691	2841	2990	3140	3289	3439	3588	3738
24	936	1092	1248	1404	1560	1716	1872	2028	2184	2340	2496	2652	2808	2964	3120	3276	3432	3588	3744	3900
25	975	1138	1300	1463	1625	1788	1950	2113	2275	2438	2600	2763	2925	3088	3250	3413	3575	3738	3900	4063
26	1014	1183	1352	1521	1690	1859	2028	2197	2366	2535	2704	2873	3042	3211	3380	3549	3718	3887	4056	4225
27	1053	1229	1404	1580	1755	1931	2106	2282	2457	2633	2808	2984	3161	3335	3510	3686	3861	4037	4212	4388
28	1092	1274	1456	1638	1820	2002	2184	2366	2548	2730	2912	3094	3276	3458	3640	3822	4004	4186	4368	4550
29	1131	1320	1508	1697	1885	2074	2262	2451	2639	2828	3016	3205	3393	3582	3770	3959	4147	4336	4524	4713
30	1170	1365	1560	1755	1950	2145	2340	2535	2730	2925	3120	3315	3510	3705	3900	4095	4290	4485	4680	4875
31	1209	1411	1612	1814	2015	2217	2418	2620	2821	3023	3224	3426	3627	3829	4030	4232	4433	4635	4836	5038
32	1248	1456	1664	1872	2080	2288	2496	2704	2912	3120	3328	3536	3744	3952	4160	4368	4576	4784	4992	5200
33	1287	1502	1716	1931	2145	2360	2574	2789	3003	3218	3432	3647	3861	4076	4290	4505	4719	4934	5148	5363
34	1326	1547	1768	1989	2210	2431	2652	2873	3094	3315	3536	3757	3978	4199	4420	4641	4862	5083	5304	5525
35	1365	1593	1820	2048	2275	2503	2730	2958	3185	3413	3640	3868	4095	4323	4550	4778	5005	5233	5460	5688
36	1404	1638	1872	2106	2340	2574	2808	3042	3276	3510	3744	3978	4212	4446	4680	4914	5148	5382	5616	5850
37	1443	1684	1924	2165	2405	2646	2886	3127	3367	3608	3848	4089	4329	4570	4810	5051	5291	5532	5772	6013
38	1482	1729	1976	2223	2470	2717	2964	3211	3458	3705	3952	4199	4446	4693	4940	5187	5434	5681	5928	6175
39	1521	1775	2028	2282	2535	2789	3042	3296	3549	3803	4056	4310	4563	4817	5070	5324	5577	5831	6084	6338
40	1560	1820	2080	2340	2600	2860	3120	3380	3640	3900	4160	4420	4680	4940	5200	5460	5720	5980	6240	6500
41	1599	1866	2132	2399	2665	2932	3198	3465	3731	3998	4264	4531	4797	5064	5330	5597	5863	6130	6396	6663
42	1638	1911	2184	2457	2730	3003	3276	3549	3822	4095	4368	4641	4914	5187	5460	5733	6006	6279	6552	6825
43	1677	1957	2236	2516	2795	3075	3354	3634	3913	4193	4472	4752	5031	5311	5590	5870	6149	6429	6708	6988
44	1716	2002	2288	2574	2860	3146	3432	3718	4004	4290	4576	4862	5148	5434	5720	6006	6292	6578	6864	7150
45	1755	2048	2340	2633	2925	3218	3510	3803	4095	4388	4680	4973	5265	5558	5850	6143	6435	6728	7020	7313
46	1794	2093	2392	2691	2990	3289	3588	3887	4186	4485	4784	5083	5382	5681	5980	6279	6578	6877	7176	7475
47	1833	2139	2444	2750	3055	3361	3666	3972	4277	4583	4888	5194	5499	5805	6110	6416	6721	7027	7332	7638
48	1872	2184	2496	2808	3120	3432	3744	4056	4368	4680	4992	5304	5616	5928	6240	6552	6864	7176	7488	7800
49	1911	2230	2548	2867	3185	3504	3822	4141	4459	4778	5096	5415	5733	6052	6370	6689	7007	7326	7644	7963
50	1950	2275	2600	2925	3250	3575	3900	4225	4550	4875	5200	5525	5850	6175	6500	6825	7150	7475	7800	8125

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	2197																		
13½	2282	2369																	
14	2366	2457	2548																
14½	2451	2545	2639	2733															
15	2535	2633	2730	2828	2925														
15½	2620	2720	2821	2922	3023	3123													
16	2704	2808	2912	3016	3120	3224	3328												
16½	2789	2896	3003	3110	3218	3325	3432	3539											
17	2873	2984	3094	3205	3315	3426	3536	3647											
17½	2958	3071	3185	3299	3413	3526	3640	3754	3868										
18	3042	3159	3276	3393	3510	3627	3744	3861	3978	4095									
18½	3127	3247	3367	3487	3608	3728	3848	3968	4089	4209	4329								
19	3211	3335	3458	3582	3705	3829	3952	4076	4199	4323	4446	4570							
19½	3296	3422	3549	3676	3803	3929	4056	4183	4310	4436	4563	4690	4817						
20	3380	3510	3640	3770	3900	4030	4160	4290	4420	4550	4680	4810	4940	5200					
21	3549	3686	3822	3959	4095	4232	4368	4505	4641	4778	4914	5051	5187	5460	5733				
22	3718	3861	4004	4147	4290	4433	4576	4719	4862	5005	5148	5291	5434	5720	6006	6292			
23	3887	4037	4186	4336	4485	4635	4784	4934	5083	5233	5382	5532	5681	5980	6279	6578	6877		
24	4056	4212	4368	4524	4680	4836	4992	5148	5304	5460	5616	5772	5928	6240	6552	6864	7176	7488	
25	4225	4388	4550	4713	4875	5038	5200	5363	5525	5688	5850	6013	6175	6500	6825	7150	7475	7800	8125
26	4394	4563	4732	4901	5070	5239	5408	5577	5746	5915	6084	6253	6422	6760	7098	7436	7774	8112	8450
27	4563	4739	4914	5090	5265	5441	5616	5792	5967	6143	6318	6494	6669	7020	7371	7722	8073	8424	8775
28	4732	4914	5096	5278	5460	5642	5824	6006	6188	6370	6552	6734	6916	7280	7644	8008	8372	8736	9100
29	4901	5090	5278	5467	5655	5844	6032	6221	6409	6598	6786	6975	7163	7540	7917	8294	8671	9048	9425
30	5070	5265	5460	5655	5850	6045	6240	6435	6630	6825	7020	7215	7410	7800	8190	8580	8970	9360	9750
31	5239	5441	5642	5844	6045	6247	6448	6650	6851	7053	7254	7456	7657	8060	8463	8866	9269	9672	10075
32	5408	5616	5824	6032	6240	6448	6656	6864	7072	7280	7488	7696	7904	8320	8736	9152	9568	9984	10400
33	5577	5792	6006	6221	6435	6650	6864	7079	7293	7508	7722	7937	8151	8580	9009	9438	9867	10296	10725
34	5746	5967	6188	6409	6630	6851	7072	7293	7514	7735	7956	8177	8398	8840	9282	9724	10166	10608	11050
35	5915	6143	6370	6598	6825	7053	7280	7508	7735	7963	8190	8418	8645	9100	9555	10010	10465	10920	11375
36	6084	6318	6552	6786	7020	7254	7488	7722	7956	8190	8424	8658	8892	9360	9828	10296	10764	11232	11700
37	6253	6494	6734	6975	7215	7456	7696	7937	8177	8418	8658	8899	9139	9620	10101	10582	11063	11544	12025
38	6422	6669	6916	7163	7410	7657	7904	8151	8398	8645	8892	9139	9386	9880	10374	10868	11362	11856	12350
39	6591	6845	7098	7352	7605	7859	8112	8366	8619	8873	9126	9380	9633	10140	10647	11154	11661	12168	12675
40	6760	7020	7280	7540	7800	8060	8320	8580	8840	9100	9360	9620	9880	10400	10920	11440	11960	12480	13000
41	6929	7196	7462	7729	7995	8262	8528	8795	9061	9328	9594	9861	10127	10660	11193	11726	12259	12792	13325
42	7098	7371	7644	7917	8190	8463	8736	9009	9282	9555	9828	10101	10374	10920	11466	12012	12558	13104	13650
43	7267	7547	7826	8106	8385	8665	8944	9224	9503	9783	10062	10342	10621	11180	11739	12298	12857	13416	13975
44	7436	7722	8008	8294	8580	8866	9152	9438	9724	10010	10296	10582	10868	11440	12012	12584	13156	13728	14300
45	7605	7898	8190	8483	8775	9068	9360	9653	9945	10238	10530	10823	11115	11700	12285	12870	13455	14040	14625
46	7774	8073	8372	8671	8970	9269	9568	9867	10166	10465	10764	11063	11362	11960	12558	13156	13754	14352	14950
47	7943	8249	8554	8860	9165	9471	9776	10082	10387	10693	10998	11304	11609	12220	12831	13442	14053	14664	15275
48	8112	8424	8736	9048	9360	9672	9984	10296	10608	10920	11232	11544	11856	12480	13104	13728	14352	14976	15600
49	8281	8600	8918	9237	9555	9874	10192	10511	10829	11148	11466	11785	12103	12740	13377	14014	14651	15288	15925
50	8450	8775	9100	9425	9750	10075	10400	10725	11050	11375	11700	12025	12350	13000	13650	14300	14950	15600	16250

13 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	5850	6175	6500	6825	7150	7475	7800	8125								
26	6084	6422	6760	7098	7436	7774	8112	8450	8788							
27	6318	6669	7020	7371	7722	8073	8424	8775	9126	9477						
28	6552	6916	7280	7644	8008	8372	8736	9100	9464	9828	10192					
29	6786	7163	7540	7917	8294	8671	9048	9425	9802	10179	10556	10933				
30	7020	7410	7800	8190	8580	8970	9360	9750	10140	10530	10920	11310	11700			
31	7254	7657	8060	8463	8866	9269	9672	10075	10478	10881	11284	11687	12090	12493		
32	7488	7904	8320	8736	9152	9568	9984	10400	10816	11232	11648	12064	12480	12896	13312	
33	7722	8151	8580	9009	9438	9867	10296	10725	11154	11583	12012	12441	12870	13299	13728	14157
34	7956	8398	8840	9282	9724	10166	10608	11050	11492	11934	12376	12818	13260	13702	14144	14586
35	8190	8645	9100	9555	10010	10465	10920	11375	11830	12285	12740	13195	13650	14105	14560	15015
36	8424	8892	9360	9828	10296	10764	11232	11700	12168	12636	13104	13572	14040	14508	14976	15444
37	8658	9139	9620	10101	10582	11063	11544	12025	12506	12987	13468	13949	14430	14911	15392	15873
38	8892	9386	9880	10374	10868	11362	11856	12350	12844	13338	13832	14326	14820	15314	15808	16302
39	9126	9633	10140	10647	11154	11661	12168	12675	13182	13689	14196	14703	15210	15717	16224	16731
40	9360	9880	10400	10920	11440	11960	12480	13000	13520	14040	14560	15080	15600	16120	16640	17160
41	9594	10127	10660	11193	11726	12259	12792	13325	13858	14391	14924	15457	15990	16523	17056	17589
42	9828	10374	10920	11466	12012	12558	13104	13650	14196	14742	15288	15834	16380	16926	17472	18018
43	10062	10621	11180	11739	12298	12857	13416	13975	14534	15093	15652	16211	16770	17329	17888	18447
44	10296	10868	11440	12012	12584	13156	13728	14300	14872	15444	16016	16588	17160	17732	18304	18876
45	10530	11115	11700	12285	12870	13455	14040	14625	15210	15795	16380	16965	17550	18135	18720	19305
46	10764	11362	11960	12558	13156	13754	14352	14950	15548	16146	16744	17342	17940	18538	19136	19734
47	10998	11609	12220	12831	13442	14053	14664	15275	15886	16497	17108	17719	18330	18941	19552	20163
48	11232	11856	12480	13104	13728	14352	14976	15600	16224	16848	17472	18096	18720	19344	19968	20592
49	11466	12103	12740	13377	14014	14651	15288	15925	16562	17199	17836	18473	19110	19747	20384	21021
50	11700	12350	13000	13650	14300	14950	15600	16250	16900	17550	18200	18850	19500	20150	20800	21450
52	12168	12844	13520	14196	14872	15548	16224	16900	17576	18252	18928	19604	20280	20956	21632	22308
54	12636	13343	14040	14742	15444	16146	16848	17550	18252	18954	19656	20358	21060	21762	22464	23166
56	13104	13832	14560	15288	16016	16744	17472	18200	18928	19656	20384	21112	21840	22568	23296	24024
58	13572	14326	15080	15834	16588	17342	18096	18850	19604	20358	21112	21866	22620	23374	24128	24882
60	14040	14820	15600	16380	17160	17940	18720	19500	20280	21060	21840	22620	23400	24180	24960	25740
62	14508	15314	16120	16926	17732	18538	19344	20150	20956	21762	22568	23374	24180	24986	25792	26598
64	14976	15808	16640	17472	18304	19136	19968	20800	21632	22464	23296	24128	24960	25792	26624	27456
66	15444	16302	17160	18018	18876	19734	20592	21450	22308	23166	24024	24882	25740	26598	27456	28314
68	15912	16796	17680	18564	19448	20332	21216	22100	22984	23868	24752	25636	26520	27404	28288	29172
70	16380	17290	18200	19110	20020	20930	21840	22750	23660	24570	25480	26390	27300	28210	29120	30030
72	16848	17784	18720	19656	20592	21528	22464	23400	24336	25272	26208	27144	28080	29016	29952	30888
74	17316	18278	19240	20202	21164	22126	23088	24050	25012	25974	26936	27898	28860	29822	30784	31746
76	17784	18772	19760	20748	21736	22724	23712	24700	25688	26676	27664	28652	29640	30628	31616	32604
78	18252	19266	20280	21294	22308	23322	24336	25350	26364	27378	28392	29406	30420	31434	32448	33462
80	18720	19760	20800	21840	22880	23920	24960	26000	27040	28080	29120	30160	31200	32240	33280	34320
85	19890	20995	22100	23205	24310	25415	26520	27625	28730	29835	30940	32045	33150	34255	35360	36465
90	21060	22230	23400	24570	25740	26910	28080	29250	30420	31590	32760	33930	35100	36270	37440	38610
95	22230	23465	24700	25935	27170	28405	29640	30875	32110	33345	34580	35815	37050	38285	39520	40755
100	23400	24700	26000	27300	28600	29900	31200	32500	33800	35100	36400	37700	39000	40300	41600	42900
105	24570	25935	27300	28665	30030	31395	32760	34125	35490	36855	38220	39585	40950	42315	43680	45045
110	25740	27170	28600	30030	31460	32890	34320	35750	37180	38610	39040	40470	42900	44330	45760	47190
115	26910	28405	29900	31395	32890	34385	35880	37375	38870	40365	41860	43355	44850	46345	47840	49335
120	28080	29640	31200	32760	34320	35880	37440	39000	40560	42120	43680	45240	46800	48360	49920	51480
125	29250	30875	32500	34125	35750	37375	39000	40625	42250	43875	45500	47125	48750	50375	52000	53625
130	30420	32110	33800	35490	37180	38870	40560	42250	43940	45630	47320	49010	50700	51390	53080	55770
135	31590	33345	35100	36855	38610	40365	42120	43875	45630	47385	49140	50895	52650	54405	56160	57915
140	32760	34580	36400	38220	40040	41860	43680	45500	47320	49140	50960	52780	54600	56420	58240	60060
145	33930	35815	37700	39585	41470	43355	45240	47125	49010	50895	52780	54665	56550	58435	60320	62205
150	35100	37030	39000	40950	42900	44850	46800	48750	50700	52650	54600	56550	58500	60450	62400	64350
155	36270	38285	40300	42315	44330	46345	48360	50375	52390	54405	56420	58435	60450	62465	64480	66495
160	37440	39520	41600	43680	45760	47840	49920	52000	54080	56160	58240	60320	62400	64480	66560	68640
165	38610	40755	42900	45045	47190	49335	51480	53625	55770	57915	60060	62205	64350	66495	68640	70785
170	39780	41990	44200	46410	48620	50830	53040	55250	57460	59670	61880	64090	66300	68510	70720	72930
175	40950	43225	45550	47775	50000	52325	54650	56975	59300	61625	63950	66275	68600	70925	73250	75575
180	42120	44460	46800	49140	51480	53820	56160	58500	60840	63180	65520	67860	70200	72540	74880	77220
185	43290	45695	48100	50505	52910	55315	57720	60125	62530	64935	67340	69745	72150	74555	76960	79365
190	44460	46930	49400	51870	54340	56810	59280	61750	64220	66690	69160	71630	74100	76570	79040	81510
195	45630	48165	50700	53235	55770	58305	60840	63375	65910	68445	70980	73515	76050	78585	81120	83655
200	46800	49400	52000	54600	57200	59800	62400	65000	67600	70200	72800	75400	78000	80600	83200	85800

	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	50
34 15028																
35 15470 15925																
36 15912 16380 16848																
37 16354 16835 17316 17797																
38 16796 17290 17784 18278					18772											
39 17238 17745 18252 18759					19266	19773										
40 17680 18200 18720 19240					19760	20280	20800									
41 18122 18655 19188 19721					20254	20787	21320	21853								
42 18564 19110 19656 20202					20748	21294	21840	22386	22932							
43 19006 19565 20124 20683					21242	21801	22360	22919	23478	24037						
44 19448 20020 20592 21164					21736	22308	22880	23452	24024	24596	25168					
45 19890 20475 21060 21645					22230	22815	23400	23985	24570	25155	25740	26325				
46 20332 20930 21528 22126					22724	23322	23920	24518	25116	25714	26312	26910	27508			
47 20774 21385 21996 22607					23218	23829	24440	25051	25662	26273	26884	27495	28106	28717		
48 21216 21840 22464 23088					23712	24336	24960	25584	26208	26832	27456	28080	28704	29328	29952	
49 21658 22295 22932 23569					24206	24843	25480	26117	26754	27391	28028	28665	29302	29939	30576	31850
50 22100 22750 23400 24050					24700	25350	26000	26650	27300	27950	28600	29250	29900	30550	31200	32500
52 22984 23660 24336 25012					25688	26364	27040	27716	28392	29068	29744	30420	31096	31772	32448	33800
54 23868 24570 25272 25974					26676	27378	28080	28782	29484	30186	30888	31590	32292	32994	33696	35100
56 24752 25480 26208 26936					27664	28392	29120	29848	30576	31304	32032	32760	33488	34216	34944	36400
58 25636 26390 27144 27898					28652	29406	30160	30914	31668	32422	33176	33930	34684	35438	36192	37700
60 26520 27300 28080 28860					29640	30420	31200	31980	32760	33540	34320	35100	35880	36660	37440	39000
62 27404 28210 29016 29822					30628	31434	32240	33046	33852	34658	35464	36270	37076	37882	38688	40300
64 28288 29120 29952 30784					31616	32448	33280	34112	34944	35776	36608	37440	38272	39104	39936	41600
66 29172 30030 30888 31746					32604	33462	34320	35178	36036	36894	37752	38610	39468	40326	41184	42900
68 30056 30940 31824 32708					33592	34476	35360	36244	37128	38012	38896	39780	40664	41548	42432	44200
70 30940 31850 32760 33670					34580	35490	36400	37310	38220	39130	40040	40950	41860	42770	43680	45500
72 31824 32760 33696 34632					35568	36504	37440	38376	39312	40248	41184	42120	43056	43992	44928	46800
74 32708 33670 34632 35594					36556	37518	38480	39442	40404	41366	42328	43290	44252	45214	46176	48100
76 33592 34580 35568 36556					37544	38532	39520	40508	41496	42484	43472	44460	45448	46436	47424	49400
78 34476 35490 36504 37518					38532	39546	40560	41574	42588	43602	44616	45630	46644	47658	48672	50700
80 35360 36400 37440 38480					39520	40560	41600	42640	43680	44720	45760	46800	47840	48880	49920	52000
85 37570 38675 39780 40885					41990	43095	44200	45305	46410	47515	48620	49725	50830	51935	53040	55250
90 39780 40950 42120 43290					44460	45630	46800	47970	49140	50310	51480	52650	53820	54990	56160	58500
95 41990 43225 44460 45695					46930	48165	49400	50635	51870	53105	54340	55575	56810	58045	59280	61750
100 44200 45500 46800 48100					49400	50700	52000	53300	54600	55900	57200	58500	59800	61100	62400	65000
105 46410 47775 49140 50505					51870	53235	54600	55965	57330	58695	60060	61425	62790	64155	65520	68250
110 48620 50050 51480 52910					54340	55770	57200	58630	60060	61490	62920	64350	65780	67210	68640	71500
115 50830 52325 53820 55315					56810	58305	59800	61295	62790	64285	65780	67275	68770	70265	71760	74750
120 53040 54600 56160 57720					59280	60840	62400	63960	65520	67080	68640	70200	71760	73320	74880	78000
125 55250 56875 58500 60125					61750	63375	65000	66625	68250	69875	71500	73125	74750	76375	78000	81250
130 57460 59150 60840 62530					64220	65910	67600	69290	70980	72670	74360	76050	77740	79430	81120	84500
135 59670 61425 63180 64935					66690	68445	70200	71955	73710	75465	77220	78975	80730	82485	84240	87750
140 61880 63700 65520 67340					69160	70980	72800	74620	76440	78260	80080	81900	83720	85540	87360	91000
145 64090 65975 67860 69745					71630	73515	75400	77285	79170	81055	82940	84825	86710	88595	90480	94250
150 66300 68250 70200 72150					74100	76050	78000	79950	81900	83850	85800	87750	89700	91650	93600	97500
155 68510 70525 72540 74555					76570	78585	80600	82615	84630	86645	88660	90675	92690	94705	96720	100750
160 70720 72800 74880 76960					79040	81120	83200	85280	87360	89440	91520	93600	95680	97760	99840	104000
165 72930 75075 77220 79365					81510	83655	85800	87945	90090	92235	94380	96525	98670	100815	102960	107250
170 75140 77350 79560 81770					83980	86190	88400	90610	92820	95030	97240	99450	101660	103870	106080	110500
175 77350 79625 81900 84175					86450	88725	91000	93275	95550	97825	100100	102375	104650	106925	109200	113750
180 79560 81900 84240 86580					88920	91260	93600	95940	98280	100620	102960	105300	107640	109980	112320	117000
185 81770 84175 86580 88985					91390	93795	96200	98605	101010	103415	105820	108225	110630	113035	115440	120250
190 83980 86450 88920 91390					93860	96330	98800	101270	103740	106210	108680	111150	113620	116090	118560	123500
195 86190 88725 91260 93795					96330	98865	101400	103935	106470	109005	111540	114075	116610	119145	121680	126750
200 88400 91000 93600 96200					98800	101400	104000	106600	109200	111800	114400	117000	119600	122200	124800	130000

13¹/₂ CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3 ¹ / ₂	4	4 ¹ / ₂	5	5 ¹ / ₂	6	6 ¹ / ₂	7	7 ¹ / ₂	8	8 ¹ / ₂	9	9 ¹ / ₂	10	10 ¹ / ₂	11	11 ¹ / ₂	12	12 ¹ / ₂
3	122																			
3 ¹ / ₂	142	165																		
4	162	189	216																	
4 ¹ / ₂	182	213	243	273																
5	203	236	270	304	338															
5 ¹ / ₂	223	260	297	334	371	408														
6	243	284	324	365	405	446	486													
6 ¹ / ₂	263	307	351	395	439	483	527	570												
7	284	331	378	425	473	520	567	614	662											
7 ¹ / ₂	304	354	405	456	506	557	608	658	709	759										
8	324	378	432	486	540	594	648	702	756	810	864	918								
8 ¹ / ₂	344	402	459	516	574	631	689	746	803	861	918	975	1033							
9	365	425	486	547	608	668	729	790	851	911	972	1033	1094	1154						
9 ¹ / ₂	385	449	513	577	641	705	770	834	898	962	1026	1090	1154	1218	1283					
10	405	473	540	608	675	743	810	878	945	1013	1080	1148	1215	1283	1350	1418				
10 ¹ / ₂	425	497	567	638	709	780	851	921	992	1063	1134	1205	1276	1347	1418	1488	1559			
11	446	520	594	668	743	817	891	965	1040	1114	1188	1262	1337	1411	1485	1559	1634	1708		
11 ¹ / ₂	466	543	621	699	776	854	932	1009	1087	1164	1242	1320	1397	1475	1553	1630	1708	1785	1863	
12	486	567	648	729	810	891	972	1053	1134	1215	1296	1377	1458	1539	1620	1701	1782	1863	1944	2025
12 ¹ / ₂	506	591	675	760	844	928	1013	1097	1181	1266	1350	1434	1519	1603	1688	1772	1856	1941	2025	2109
13	527	614	702	790	878	965	1053	1141	1229	1316	1404	1492	1580	1667	1755	1843	1931	2018	2106	2194
13 ¹ / ₂	547	638	729	820	911	1002	1094	1185	1276	1367	1458	1549	1640	1731	1823	1914	2005	2096	2187	2278
14	567	662	756	851	945	1040	1134	1229	1323	1418	1512	1607	1701	1796	1890	1985	2079	2174	2268	2363
14 ¹ / ₂	587	685	783	881	979	1077	1175	1272	1370	1468	1566	1664	1762	1860	1958	2055	2153	2251	2349	2447
15	608	709	810	911	1013	1114	1215	1316	1418	1519	1620	1721	1822	1924	2025	2126	2228	2329	2430	2531
15 ¹ / ₂	628	733	837	942	1046	1151	1256	1360	1465	1569	1674	1779	1883	1988	2093	2197	2302	2406	2511	2616
16	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	2700
16 ¹ / ₂	668	780	891	1003	1114	1225	1337	1448	1559	1671	1782	1893	2005	2116	2228	2339	2450	2562	2673	2784
17	688	804	918	1033	1148	1262	1377	1492	1607	1721	1836	1951	2066	2180	2295	2410	2525	2639	2754	2869
17 ¹ / ₂	709	827	945	1063	1181	1299	1418	1536	1654	1772	1890	2008	2126	2244	2363	2481	2599	2717	2835	2953
18	729	851	972	1094	1215	1337	1458	1580	1701	1823	1944	2066	2187	2309	2430	2552	2673	2795	2916	3038
18 ¹ / ₂	749	875	999	1124	1249	1374	1499	1623	1748	1873	1998	2123	2248	2373	2498	2622	2747	2872	2997	3122
19	769	898	1026	1154	1283	1411	1539	1667	1796	1924	2052	2180	2309	2437	2565	2693	2822	2950	3078	3206
19 ¹ / ₂	789	922	1053	1185	1316	1448	1580	1711	1843	1974	2106	2238	2369	2501	2633	2764	2896	3027	3159	3291
20	810	946	1080	1215	1350	1485	1620	1755	1890	2025	2160	2295	2430	2565	2700	2835	2970	3105	3240	3375
21	851	992	1134	1276	1418	1559	1701	1843	1985	2126	2268	2410	2552	2693	2835	2977	3119	3260	3402	3544
22	891	1040	1188	1337	1485	1634	1782	1931	2079	2228	2376	2525	2673	2822	2970	3119	3267	3416	3564	3713
23	932	1087	1242	1397	1553	1708	1863	2018	2174	2329	2484	2639	2795	2950	3105	3260	3416	3571	3726	3881
24	972	1134	1296	1458	1620	1782	1944	2106	2268	2430	2592	2754	2916	3078	3240	3402	3564	3726	3888	4050
25	1013	1181	1350	1519	1688	1856	2025	2194	2363	2531	2700	2869	3038	3206	3375	3544	3713	3881	4050	4219
26	1053	1229	1404	1580	1755	1931	2106	2282	2457	2633	2808	2984	3159	3335	3510	3686	3861	4037	4212	4388
27	1094	1276	1458	1640	1823	2005	2187	2369	2552	2734	2916	3098	3281	3463	3645	3827	4010	4192	4374	4556
28	1134	1323	1512	1701	1890	2079	2268	2457	2646	2835	3024	3213	3402	3591	3780	3969	4158	4347	4536	4725
29	1175	1370	1566	1762	1958	2153	2349	2545	2741	2936	3132	3328	3524	3719	3915	4111	4307	4502	4698	4894
30	1215	1418	1620	1823	2025	2228	2430	2633	2835	3038	3240	3443	3645	3848	4050	4253	4455	4658	4860	5063
31	1256	1465	1674	1883	2093	2302	2511	2720	2930	3139	3348	3557	3767	3976	4185	4394	4604	4813	5022	5231
32	1296	1512	1728	1944	2160	2376	2592	2808	3024	3240	3456	3672	3888	4104	4320	4536	4752	4968	5184	5400
33	1337	1559	1782	2005	2228	2450	2673	2896	3119	3341	3564	3787	4010	4232	4455	4678	4901	5123	5346	5569
34	1377	1607	1836	2066	2295	2525	2754	2984	3213	3443	3672	3902	4131	4361	4590	4820	5049	5279	5508	5738
35	1418	1654	1890	2126	2363	2599	2835	3071	3308	3544	3780	4016	4253	4489	4725	4961	5198	5434	5670	5906
36	1458	1701	1944	2187	2430	2673	2916	3159	3402	3645	3888	4131	4374	4617	4860	5103	5346	5589	5832	6075
37	1499	1748	1998	2248	2498	2747	2997	3247	3497	3746	3996	4246	4496	4745	4995	5245	5495	5744	5994	6244
38	1539	1796	2052	2309	2565	2822	3078	3335	3591	3848	4104	4361	4617	4874	5130	5387	5643	5900	6156	6413
39	1580	1843	2106	2369	2633	2896	3159	3422	3686	3949	4212	4475	4739	5002	5265	5528	5792	6055	6318	6581
40	1620	1890	2160	2430	2700	2970	3240	3510	3780	4050	4320	4590	4860	5130	5400	5670	5940	6210	6480	6750
41	1660	1937	2214	2491	2768	3044	3321	3598	3875	4151	4428	4705	4982	5258	5535	5812	6089	6365	6642	6919
42	1701	1985	2268	2552	2835	3119	3402	3686	3969	4253	4536	4820	5103	5387	5670	5954	6237	6521	6804	7088
43	1742	2032	2322	2612	2903	3193	3483	3773	4064	4354	4644	4934	5225	5515	5805	6095	6386	6676	6966	7256
44	1782	2079	2376	2673	2970	3267	3564	3861	4158	4455	4752	5049	5346	5643	5940	6237	6534	6831	7128	7425
45	1823	2126	2430	2734	3038	3341	3645	3949	4253	4556	4860	5164	5468	5771	6075	6379	6683	6986	7290	7594
46	1863	2174	2484	2795	3105	3416	3726	4037	4347	4658	4968	5279	5589	5900	6210	6521	6831	7142	7452	7763
47	1904	2221	2538	2855	3173	3490	3807	4124	4442	4759	5076	5393	5711	6028	6345	6662	6980	7297	7614	7931
48	1944	2268	2592	2916	3240	3564	3888	4212	4536	4860	5184	5508	5832	6156	6480	6804	7128	7452	7776	8100
49	1985	2315	2646	2977	3308	3638	3969	4300	4631	4961	5292	5623	5954	6284	6615	6946	7277	7607	7938	8269
50	2025	2363	2700	3038	3375	3713	4050	4388	4725	5063	5400	5738	6075	6413	6750	7088	7425	7763	8100	8438

SMALLER HAVING CEILINGS 13 $\frac{1}{2}$ FT. HIGH. 13 $\frac{1}{2}$

	13	13 $\frac{1}{2}$	14	14 $\frac{1}{2}$	15	15 $\frac{1}{2}$	16	16 $\frac{1}{2}$	17	17 $\frac{1}{2}$	18	18 $\frac{1}{2}$	19	20	21	22	23	24	25
13	2282																		
13 $\frac{1}{2}$	2369	2460																	
14	2457	2552	2646																
14 $\frac{1}{2}$	2545	2643	2741	2838															
15	2633	2734	2835	2936	3038														
15 $\frac{1}{2}$	2720	2825	2930	3034	3139	3243													
16	2808	2916	3024	3132	3240	3348	3456												
16 $\frac{1}{2}$	2896	3007	3119	3230	3341	3453	3564	3675											
17	2984	3098	3213	3328	3443	3557	3672	3787	3902										
17 $\frac{1}{2}$	3071	3189	3308	3426	3544	3662	3780	3898	4016	4134									
18	3159	3281	3402	3524	3645	3767	3888	4010	4131	4253	4374								
18 $\frac{1}{2}$	3247	3372	3497	3621	3746	3871	3996	4121	4246	4371	4496	4620							
19	3335	3463	3591	3719	3848	3976	4104	4232	4361	4489	4617	4745	4874						
19 $\frac{1}{2}$	3422	3554	3686	3817	3949	4080	4212	4344	4475	4607	4739	4870	5002	5265					
20	3510	3645	3780	3915	4050	4185	4320	4455	4590	4725	4860	4995	5130	5400	5670				
21	3686	3827	3969	4111	4253	4394	4536	4678	4820	4961	5103	5245	5387	5670	5954	6237			
22	3861	4010	4158	4307	4455	4604	4752	4901	5049	5198	5346	5495	5643	5940	6237	6534	6831		
23	4037	4192	4347	4502	4658	4813	4968	5123	5279	5434	5589	5744	5900	6210	6521	6831	7142	7452	
24	4212	4374	4536	4698	4860	5022	5184	5346	5508	5670	5832	5994	6156	6480	6804	7128	7452	7776	8100
25	4388	4556	4725	4894	5063	5231	5400	5569	5738	5906	6075	6244	6413	6750	7088	7425	7763	8100	8438
26	4563	4739	4914	5090	5265	5441	5616	5792	5967	6143	6318	6494	6669	7020	7371	7722	8073	8424	8775
27	4739	4921	5103	5285	5468	5650	5832	6014	6197	6379	6561	6743	6926	7290	7655	8019	8384	8748	9113
28	4914	5103	5292	5481	5670	5859	6048	6237	6426	6615	6804	6993	7182	7560	7938	8316	8694	9072	9450
29	5090	5285	5481	5677	5873	6068	6264	6460	6656	6851	7047	7243	7439	7830	8222	8613	9005	9396	9788
30	5265	5468	5670	5873	6075	6278	6480	6683	6885	7088	7290	7493	7695	8100	8505	8910	9315	9720	10125
31	5441	5650	5859	6068	6278	6487	6696	6905	7115	7324	7533	7742	7952	8370	8789	9207	9626	10044	10463
32	5616	5832	6048	6264	6480	6696	6912	7128	7344	7560	7776	7992	8208	8640	9072	9504	9936	10368	10800
33	5792	6014	6237	6460	6683	6905	7128	7351	7574	7796	8019	8242	8465	8910	9356	9801	10247	10692	11138
34	5967	6197	6426	6656	6885	7115	7344	7574	7803	8033	8262	8492	8721	9180	9639	10098	10557	11016	11475
35	6143	6379	6615	6851	7088	7324	7560	7796	8033	8269	8505	8741	8978	9450	9923	10395	10868	11340	11813
36	6318	6561	6804	7047	7290	7533	7776	8019	8262	8505	8748	8991	9234	9720	10206	10692	11178	11664	12150
37	6494	6743	6993	7243	7493	7742	7992	8242	8491	8741	8991	9241	9491	9990	10490	10989	11489	11988	12488
38	6669	6926	7182	7439	7695	7952	8208	8465	8721	8978	9234	9491	9747	10260	10773	11286	11799	12312	12825
39	6845	7108	7371	7634	7898	8161	8424	8687	8951	9214	9477	9740	10004	10530	11057	11583	12110	12636	13163
40	7020	7290	7560	7830	8100	8370	8640	8910	9180	9450	9720	9990	10260	10800	11340	11880	12420	12960	13500
41	7196	7472	7749	8026	8303	8579	8856	9133	9410	9686	9963	10240	10517	11070	11624	12177	12731	13284	13838
42	7371	7655	7938	8222	8505	8789	9072	9356	9639	9923	10206	10490	10773	11340	11907	12474	13041	13608	14175
43	7547	7837	8127	8417	8708	8998	9288	9578	9869	10159	10449	10739	11030	11610	12191	12771	13352	13932	14513
44	7722	8019	8316	8613	8910	9207	9504	9801	10098	10395	10692	10989	11286	11880	12474	13068	13662	14256	14850
45	7898	8201	8505	8809	9113	9416	9720	10024	10328	10631	10935	11239	11543	12150	12758	13365	13973	14580	15188
46	8073	8384	8694	9005	9315	9626	9936	10247	10557	10868	11178	11489	11799	12420	13041	13662	14283	14904	15525
47	8249	8566	8883	9200	9518	9835	10152	10469	10787	11104	11421	11738	12056	12690	13325	13959	14594	15228	15863
48	8424	8748	9072	9396	9720	10044	10368	10692	11016	11340	11664	11988	12312	12960	13608	14256	14904	15552	16200
49	8600	8930	9261	9592	9923	10253	10584	10915	11246	11576	11907	12238	12569	13230	13892	14553	15215	15876	16538
50	8775	9113	9450	9788	10125	10463	10800	11138	11475	11813	12150	12488	12825	13500	14175	14850	15525	16200	16875

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	126																			
3½	147	172																		
4	168	196	224																	
4½	189	221	252	284																
5	210	245	280	315	350															
5½	231	270	308	347	385	424														
6	252	294	336	378	420	462	504													
6½	273	319	364	410	455	501	546	592												
7	294	343	392	441	490	539	588	637	686											
7½	315	368	420	473	525	578	630	683	735	788										
8	336	392	448	504	560	616	672	728	784	840	896									
8½	357	417	476	536	595	655	714	774	833	893	952	1012								
9	378	441	504	567	630	693	756	819	882	945	1008	1071	1134							
9½	399	466	532	599	665	732	798	865	931	998	1064	1131	1197	1264						
10	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1330	1400					
10½	441	515	588	662	735	809	882	956	1029	1103	1176	1250	1323	1397	1470	1544				
11	462	539	616	693	770	847	924	1001	1078	1155	1232	1309	1386	1463	1540	1617	1694			
11½	483	564	644	725	805	886	966	1047	1127	1208	1288	1369	1449	1530	1610	1691	1771	1852		
12	504	588	672	756	840	924	1008	1092	1176	1260	1344	1428	1512	1596	1680	1764	1848	1932	2016	
12½	525	613	700	788	875	963	1050	1138	1225	1313	1400	1488	1575	1663	1750	1838	1925	2013	2100	2188
13	546	637	728	819	910	1001	1092	1183	1274	1365	1456	1547	1638	1729	1820	1911	2002	2093	2184	2275
13½	567	662	756	851	945	1040	1134	1229	1323	1418	1512	1607	1701	1796	1890	1985	2079	2174	2268	2363
14	588	686	784	882	980	1078	1176	1274	1372	1470	1568	1666	1764	1862	1960	2058	2156	2254	2352	2450
14½	609	711	812	914	1015	1117	1218	1320	1421	1523	1624	1726	1827	1929	2030	2132	2233	2335	2436	2538
15	630	735	840	945	1050	1155	1260	1365	1470	1575	1680	1785	1890	1995	2100	2205	2310	2415	2520	2625
15½	651	760	868	977	1085	1194	1302	1411	1519	1628	1736	1845	1953	2062	2170	2279	2387	2496	2604	2713
16	672	784	896	1008	1120	1232	1344	1456	1568	1680	1792	1904	2016	2128	2240	2352	2464	2576	2688	2800
16½	693	809	924	1040	1155	1271	1386	1502	1617	1733	1848	1964	2079	2195	2310	2426	2541	2657	2772	2888
17	714	833	952	1071	1190	1309	1428	1547	1666	1785	1904	2023	2142	2261	2380	2499	2618	2737	2856	2975
17½	735	858	980	1103	1225	1348	1470	1593	1715	1838	1960	2083	2205	2328	2450	2573	2695	2818	2940	3063
18	756	882	1008	1134	1260	1386	1512	1638	1764	1890	2016	2142	2268	2394	2520	2646	2772	2898	3024	3150
18½	777	907	1036	1166	1295	1425	1554	1684	1813	1943	2072	2202	2331	2461	2590	2720	2849	2979	3108	3238
19	798	931	1064	1197	1330	1463	1596	1729	1862	1995	2128	2261	2394	2527	2660	2793	2926	3059	3192	3325
19½	819	956	1092	1229	1365	1502	1638	1775	1911	2048	2184	2321	2457	2594	2730	2867	3003	3140	3276	3413
20	840	980	1120	1260	1400	1540	1680	1820	1960	2100	2240	2380	2520	2660	2800	2940	3080	3220	3360	3500
21	882	1029	1176	1323	1470	1617	1764	1911	2058	2205	2352	2499	2646	2793	2940	3087	3234	3381	3528	3675
22	824	1078	1232	1386	1540	1694	1848	2002	2156	2310	2464	2618	2772	2926	3080	3234	3388	3542	3696	3850
23	906	1127	1288	1449	1610	1771	1932	2093	2254	2415	2576	2737	2898	3059	3220	3381	3542	3703	3864	4025
24	1008	1176	1344	1512	1680	1848	2016	2184	2352	2520	2688	2856	3024	3192	3360	3528	3696	3864	4032	4200
25	1050	1225	1400	1575	1750	1925	2100	2275	2450	2625	2800	2975	3150	3325	3500	3675	3850	4025	4200	4375
26	1092	1274	1456	1638	1820	2002	2184	2366	2548	2730	2912	3094	3276	3458	3640	3822	4004	4186	4368	4550
27	1134	1323	1512	1701	1890	2079	2268	2457	2646	2835	3024	3213	3402	3591	3780	3969	4158	4347	4536	4725
28	1176	1372	1568	1764	1960	2156	2352	2548	2744	2940	3136	3332	3528	3724	3920	4116	4312	4508	4704	4900
29	1218	1421	1624	1827	2030	2233	2436	2639	2842	3045	3248	3451	3654	3857	4060	4263	4466	4669	4872	5075
30	1260	1470	1680	1890	2100	2310	2520	2730	2940	3150	3360	3570	3780	3990	4200	4410	4620	4830	5040	5250
31	1302	1519	1736	1953	2170	2387	2604	2821	3038	3255	3472	3689	3906	4123	4340	4557	4774	4991	5208	5425
32	1344	1568	1792	2016	2240	2464	2688	2913	3136	3360	3584	3808	4032	4256	4480	4704	4928	5152	5376	5600
33	1386	1617	1848	2079	2310	2541	2772	3003	3234	3465	3696	3927	4158	4389	4620	4851	5082	5313	5544	5775
34	1428	1666	1904	2142	2380	2618	2856	3094	3332	3570	3808	4046	4284	4522	4760	4998	5236	5474	5712	5950
35	1470	1715	1960	2205	2450	2695	2940	3185	3430	3675	3920	4165	4410	4655	4900	5145	5390	5635	5880	6125
36	1512	1764	2016	2268	2520	2772	3024	3276	3528	3780	4032	4284	4536	4788	5040	5292	5544	5796	6048	6300
37	1554	1813	2072	2331	2590	2849	3108	3367	3626	3885	4144	4403	4662	4921	5180	5439	5698	5957	6216	6475
38	1596	1862	2128	2394	2660	2926	3192	3458	3724	3990	4256	4522	4788	5054	5320	5586	5852	6118	6384	6650
39	1638	1911	2184	2457	2730	3003	3276	3549	3822	4095	4368	4641	4914	5187	5460	5733	6006	6279	6552	6825
40	1680	1960	2240	2520	2800	3080	3360	3640	3920	4200	4480	4760	5040	5320	5600	5880	6160	6440	6720	7000
41	1722	2009	2296	2583	2870	3157	3444	3731	4018	4305	4592	4879	5166	5453	5740	6027	6314	6601	6888	7175
42	1764	2058	2352	2646	2940	3234	3528	3822	4116	4410	4704	4998	5292	5586	5880	6174	6468	6762	7056	7350
43	1806	2101	2402	2709	3010	3311	3612	3913	4214	4515	4816	5117	5418	5719	6020	6321	6622	6923	7224	7525
44	1848	2156	2464	2772	3080	3388	3696	4004	4312	4620	4928	5236	5544	5852	6160	6468	6776	7084	7392	7700
45	1890	2205	2520	2835	3150	3465	3780	4095	4410	4725	5040	5355	5670	5985	6300	6615	6930	7245	7560	7875
46	1932	2254	2576	2898	3220	3542	3864	4186	4508	4830	5152	5474	5796	6118	6440	6762	7084	7406	7728	8050
47	1974	2303	2632	2961	3290	3619	3948	4277	4606	4935	5264	5593	5922	6251	6580	6909	7238	7567	7896	8225
48	2016	2352	2688	3024	3360	3696	4032	4368	4704	5040	5376	5712	6048	6384	6720	7056	7392	7728	8064	8400
49	2058	2401	2744	3087	3430	3773	4116	4459	4802	5145	5488	5831	6174	6517	6860	7203	7546	7889	8232	8575
50	2100	2450	2800	3150	3500	3850	4200	4550	4900	5250	5600	5950	6300	6650	7000	7350	7700	8050	8400	8750

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	2366																	
13½	2457	2552																
14	2548	2646	2744															
14½	2639	2741	2842	2944														
15	2730	2835	2940	3045	3150													
15½	2821	2930	3038	3147	3255	3364												
16	2912	3024	3136	3248	3360	3472	3584											
16½	3003	3119	3234	3350	3465	3581	3696	3812										
17	3094	3213	3332	3451	3570	3689	3808	3927	4046									
17½	3185	3308	3430	3553	3675	3798	3920	4043	4165	4288								
18	3276	3402	3528	3654	3780	3906	4032	4158	4284	4410	4536							
18½	3367	3497	3626	3756	3885	4015	4144	4274	4403	4533	4662							
19	3458	3591	3724	3857	3990	4123	4256	4389	4522	4655	4788	5054						
19½	3549	3686	3822	3959	4095	4232	4368	4505	4641	4778	4914	5187	5460					
20	3640	3780	3920	4060	4200	4340	4480	4620	4760	4900	5040	5320	5600	5880				
21	3822	3969	4116	4263	4410	4557	4704	4851	4998	5145	5292	5586	5880	6174	6468			
22	4004	4158	4312	4466	4620	4774	4928	5082	5236	5390	5544	5852	6160	6468	6776	7084		
23	4186	4347	4508	4669	4830	4991	5152	5313	5474	5635	5796	6118	6440	6762	7084	7406	7728	
24	4368	4536	4704	4872	5040	5208	5376	5544	5712	5880	6048	6384	6720	7056	7392	7728	8064	8400
25	4550	4725	4900	5075	5250	5425	5600	5775	5950	6125	6300	6650	7000	7350	7700	8050	8400	8750
26	4732	4914	5096	5278	5460	5642	5824	6006	6188	6370	6552	6916	7280	7644	8008	8372	8736	9100
27	4914	5103	5292	5481	5670	5859	6048	6237	6426	6615	6804	7182	7560	7938	8316	8694	9072	9450
28	5096	5292	5488	5684	5880	6076	6272	6468	6664	6860	7056	7448	7840	8232	8624	9016	9408	9800
29	5278	5481	5684	5887	6090	6293	6496	6699	6902	7105	7308	7714	8120	8526	8932	9338	9744	10150
30	5460	5670	5880	6090	6300	6510	6720	6930	7140	7350	7560	7980	8400	8820	9240	9660	10080	10500
31	5642	5859	6076	6293	6510	6727	6944	7161	7378	7595	7812	8246	8680	9114	9548	9982	10416	10850
32	5824	6048	6272	6496	6720	6944	7168	7392	7616	7840	8064	8512	8960	9408	9856	10304	10752	11200
33	6006	6237	6468	6699	6930	7161	7392	7623	7854	8085	8316	8778	9240	9702	10164	10626	11088	11550
34	6188	6426	6664	6902	7140	7378	7616	7854	8092	8330	8568	9044	9520	9996	10472	10948	11424	11900
35	6370	6615	6860	7105	7350	7595	7840	8085	8330	8575	8820	9310	9800	10290	10780	11270	11760	12250
36	6552	6804	7056	7308	7560	7812	8064	8316	8568	8820	9072	9576	10080	10584	11088	11592	12096	12600
37	6734	6993	7252	7511	7770	8029	8288	8547	8806	9065	9324	9842	10360	10878	11396	11914	12432	12950
38	6916	7182	7448	7714	7980	8246	8512	8778	9044	9310	9576	10108	10640	11172	11704	12236	12768	13300
39	7098	7371	7644	7917	8190	8463	8736	9009	9282	9555	9828	10374	10920	11466	12012	12558	13104	13650
40	7280	7560	7840	8120	8400	8680	8960	9240	9520	9800	10080	10640	11200	11760	12320	12880	13440	14000
41	7462	7749	8036	8323	8610	8897	9184	9471	9758	10045	10332	10906	11480	12054	12628	13202	13776	14350
42	7644	7938	8232	8526	8820	9114	9408	9702	9996	10290	10584	11172	11760	12348	12936	13524	14112	14700
43	7826	8127	8428	8729	9030	9331	9632	9933	10234	10535	10836	11438	12040	12642	13244	13846	14448	15050
44	8008	8316	8624	8932	9240	9548	9856	10164	10472	10780	11088	11704	12320	12936	13552	14168	14784	15400
45	8190	8505	8820	9135	9450	9765	10080	10395	10710	11025	11340	11970	12600	13230	13860	14490	15120	15750
46	8372	8694	9016	9338	9660	9982	10304	10626	10948	11270	11592	12236	12880	13524	14168	14812	15456	16100
47	8554	8883	9212	9541	9870	10199	10528	10857	11186	11515	11844	12502	13160	13818	14476	15134	15792	16450
48	8736	9072	9408	9744	10080	10416	10752	11088	11424	11760	12096	12768	13440	14112	14784	15456	16128	16800
49	8918	9261	9604	9947	10290	10633	10976	11319	11662	12005	12348	13034	13720	14406	15092	15778	16464	17150
50	9100	9450	9800	10150	10500	10850	11200	11550	11900	12250	12600	13300	14000	14700	15400	16100	16800	17500

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	6300	6650	7000	7350	7700	8050	8400	8750								
26	6552	6916	7280	7644	8008	8372	8736	9100	9464							
27	6804	7182	7560	7938	8316	8694	9072	9450	9828	10206						
28	7056	7448	7840	8232	8624	9016	9408	9800	10192	10584	10976					
29	7308	7714	8120	8526	8932	9338	9744	10150	10556	10962	11368	11774				
30	7560	7980	8400	8820	9240	9660	10080	10500	10920	11340	11760	12180	12600			
31	7812	8246	8680	9114	9548	9982	10416	10850	11284	11718	12152	12586	13020	13454		
32	8064	8512	8960	9408	9856	10304	10752	11200	11648	12096	12544	12992	13440	13888	14336	
33	8316	8778	9240	9702	10164	10626	11088	11550	12012	12474	12936	13398	13860	14322	14784	15246
34	8568	9044	9520	9996	10472	10948	11424	11900	12376	12852	13328	13804	14280	14756	15232	15708
35	8820	9310	9800	10290	10780	11270	11760	12250	12740	13230	13720	14210	14700	15190	15680	16170
36	9072	9576	10080	10584	11088	11592	12096	12600	13104	13608	14112	14616	15120	15624	16128	16632
37	9324	9842	10360	10878	11396	11914	12432	12950	13468	13986	14504	15022	15540	16058	16576	17094
38	9576	10108	10640	11172	11704	12236	12768	13300	13832	14364	14896	15428	15960	16492	17024	17556
39	9828	10374	10920	11466	12012	12558	13104	13650	14196	14742	15288	15834	16380	16926	17472	18018
40	10080	10640	11200	11760	12320	12880	13440	14000	14560	15120	15680	16240	16800	17360	17920	18480
41	10332	10906	11480	12054	12628	13202	13776	14350	14924	15498	16072	16646	17220	17794	18368	18942
42	10584	11172	11760	12348	12936	13524	14112	14700	15288	15876	16464	17052	17640	18228	18816	19404
43	10836	11438	12040	12642	13244	13846	14448	15050	15652	16254	16856	17458	18060	18662	19264	19866
44	11088	11704	12320	12936	13552	14168	14784	15400	16016	16632	17248	17864	18480	19096	19712	20328
45	11340	11970	12600	13230	13860	14490	15120	15750	16380	17010	17640	18270	18900	19530	20160	20790
46	11592	12236	12880	13524	14168	14812	15456	16100	16744	17388	18032	18676	19320	19964	20608	21252
47	11844	12502	13160	13818	14476	15134	15792	16450	17108	17766	18424	19082	19740	20398	21056	21714
48	12096	12768	13440	14112	14784	15456	16128	16800	17472	18144	18816	19488	20160	20832	21504	22176
49	12348	13034	13720	14406	15092	15778	16464	17150	17836	18522	19208	19894	20580	21266	21952	22638
50	12600	13300	14000	14700	15400	16100	16800	17500	18200	18900	19600	20300	21000	21700	22400	23100
52	13104	13832	14560	15288	16016	16744	17472	18200	18928	19656	20384	21112	21840	22568	23296	24024
54	13608	14364	15120	15876	16632	17388	18144	18900	19656	20412	21168	21924	22680	23436	24192	24948
56	14112	14896	15680	16464	17248	18032	18816	19600	20384	21168	21952	22736	23520	24304	25088	25872
58	14616	15428	16240	17052	17864	18676	19488	20300	21112	21924	22736	23548	24360	25172	25984	26796
60	15120	15960	16800	17640	18480	19320	20160	21000	21840	22680	23520	24360	25200	26040	26880	27720
62	15624	16492	17360	18228	19096	19964	20832	21700	22568	23436	24304	25172	26040	26908	27776	28644
64	16128	17024	17920	18816	19712	20608	21504	22400	23296	24192	25088	25984	26880	27776	28672	29568
66	16632	17556	18480	19404	20328	21252	22176	23100	24024	24948	25872	26796	27720	28644	29568	30492
68	17136	18088	19040	19992	20944	21896	22848	23800	24752	25704	26656	27608	28560	29512	30464	31416
70	17640	18620	19600	20580	21560	22540	23520	24500	25480	26460	27440	28420	29400	30380	31360	32340
72	18144	19152	20160	21168	22176	23184	24192	25200	26208	27216	28224	29232	30240	31248	32256	33264
74	18648	19684	20720	21756	22792	23828	24864	25900	26936	27972	29008	30044	31080	32116	33152	34188
76	19152	20216	21280	22344	23408	24472	25536	26600	27664	28728	29792	30856	31920	32984	34048	35112
78	19656	20748	21840	22932	24024	25116	26208	27300	28392	29484	30576	31668	32760	33852	34944	36036
80	20160	21280	22400	23520	24640	25760	26880	28000	29120	30240	31360	32480	33600	34720	35840	36960
85	21420	22610	23800	24990	26180	27370	28560	29750	30940	32130	33320	34510	35700	36890	38080	39270
90	22680	23940	25200	26460	27720	28980	30240	31500	32760	34020	35280	36540	37800	39060	40320	41580
95	23940	25270	26600	27930	29260	30590	31920	33250	34580	35910	37240	38570	39900	41230	42560	43890
100	25200	26600	28000	29400	30800	32200	33600	35000	36400	37800	39200	40600	42000	43400	44800	46200
105	26460	27930	29400	30870	32340	33810	35280	36750	38220	39690	41160	42630	44100	45570	47040	48510
110	27720	29260	30800	32340	33880	35420	36960	38500	40040	41580	43120	44660	46200	47740	49280	50820
115	28980	30590	32200	33810	35420	37030	38640	40250	41860	43470	45080	46690	48300	49910	51520	53130
120	30240	31920	33600	35280	36960	38640	40320	42000	43680	45360	47040	48720	50400	52080	53760	55440
125	31500	33250	35000	36750	38500	40250	42000	43750	45500	47250	49000	50750	52500	54250	56000	57750
130	32760	34580	36400	38220	40040	41860	43680	45500	47320	49140	50960	52780	54600	56420	58240	60060
135	34020	35910	37800	39690	41580	43470	45360	47250	49140	51030	52920	54810	56700	58590	60480	62370
140	35280	37240	39200	41160	43120	45080	47040	49000	50960	52920	54880	56840	58800	60760	62720	64680
145	36540	38570	40600	42630	44660	46690	48720	50750	52780	54810	56840	58870	60900	62930	64960	66990
150	37800	39900	42000	44100	46200	48300	50400	52500	54600	56700	58800	60900	63000	65100	67200	69300
155	39060	41230	43400	45570	47740	49910	52080	54250	56420	58590	60760	62930	65100	67270	69440	71610
160	40320	42560	44800	47040	49280	51520	53760	56000	58240	60480	62720	64960	67200	69440	71680	73920
165	41580	43890	46200	48510	50840	53130	55440	57750	60060	62370	64680	66990	69300	71610	73920	76230
170	42840	45220	47600	49980	52360	54740	57120	59500	61880	64260	66640	69020	71400	73780	76160	78540
175	44100	46550	49000	51450	53900	56350	58800	61250	63700	66150	68600	71050	73500	75950	78400	80850
180	45360	47880	50400	52920	55440	57960	60480	63000	65520	68040	70560	73080	75600	78120	80640	83160
185	46620	49210	51800	54390	56980	59570	62160	64750	67340	69930	72520	75110	77700	80290	82880	85470
190	47880	50540	53200	55860	58520	61180	63840	66500	69160	71820	74480	77140	79800	82460	85120	87780
195	49140	51870	54600	57330	60060	62790	65520	68250	70980	73710	76440	79170	81900	84630	87360	90090
200	50400	53200	56000	58800	61600	64400	67200	70000	72800	75600	78400	81200	84000	86800	89600	92400

	34	35	36	37	38	39	40	41	42	43	44	45	46	48	50
34	16184														
35	16660	17150													
36	17136	17640	18144												
37	17612	18130	18648	19166											
38	18088	18620	19152	19684	20216										
39	18564	19110	19656	20202	20748	21294									
40	19040	19600	20160	20720	21280	21840	22400								
41	19516	20090	20664	21238	21812	22386	22960	23534							
42	19992	20580	21168	21756	22344	22932	23520	24108	24696						
43	20468	21070	21672	22274	22876	23478	24080	24682	25284	25886					
44	20944	21560	22176	22792	23408	24024	24640	25256	25872	26488	27104				
45	21420	22050	22680	23310	23940	24570	25200	25830	26460	27090	27720	28350			
46	21896	22540	23184	23828	24472	25116	25760	26404	27048	27692	28336	28980	29624		
47	22372	23030	23688	24346	25004	25662	26320	26978	27636	28294	28952	29610	30268		
48	22848	23520	24192	24864	25536	26208	26880	27552	28224	28896	29568	30240	30912	32256	
49	23324	24010	24696	25382	26068	26754	27440	28126	28812	29498	30184	30870	31556	32928	34300
50	23800	24500	25200	25900	26600	27300	28000	28700	29400	30100	30800	31500	32200	33600	35000
52	24752	25480	26208	26936	27664	28392	29120	29848	30576	31304	32032	32760	33488	34944	36400
54	25704	26460	27216	27972	28728	29484	30240	30996	31752	32508	33264	34020	34776	36288	37800
56	26656	27440	28224	29008	29792	30576	31360	32144	32928	33712	34496	35280	36064	37632	39200
58	27608	28420	29232	30044	30856	31668	32480	33292	34104	34916	35728	36540	37352	38976	40600
60	28560	29400	30240	31080	31920	32760	33600	34440	35280	36120	36960	37800	38640	40320	42000
62	29512	30380	31248	32116	32984	33852	34720	35588	36456	37324	38192	39060	39928	41664	43400
64	30464	31360	32256	33152	34048	34944	35840	36736	37632	38528	39424	40320	41216	43008	44800
66	31416	32340	33264	34188	35112	36036	36960	37884	38808	39732	40656	41580	42504	44352	46200
68	32368	33320	34272	35224	36176	37128	38080	39032	39984	40936	41888	42840	43792	45696	47600
70	33320	34300	35280	36260	37240	38220	39200	40180	41160	42140	43120	44100	45080	47040	49000
72	34272	35280	36288	37296	38304	39312	40320	41328	42336	43344	44352	45360	46368	48384	50400
74	35224	36260	37296	38332	39368	40404	41440	42476	43512	44548	45584	46620	47656	49728	51800
76	36176	37240	38304	39368	40432	41496	42560	43624	44688	45752	46816	47880	48944	51072	53200
78	37128	38220	39312	40404	41496	42588	43680	44772	45864	46956	48048	49140	50232	52416	54600
80	38080	39200	40320	41444	42560	43680	44800	45920	47040	48160	49280	50400	51520	53760	56000
85	40400	41650	42840	44030	45220	46410	47600	48790	49980	51170	52360	53550	54740	57120	59500
90	42840	44100	45360	46620	47880	49140	50400	51660	52920	54180	55440	56700	57960	60480	63000
95	45220	46550	47880	49210	50540	51870	53200	54530	55860	57190	58520	59850	61180	63840	66500
100	47600	49000	50400	51800	53200	54600	56000	57400	58800	60200	61600	63000	64400	67200	70000
105	49980	51450	52920	54390	55860	57330	58800	60270	61740	63210	64680	66150	67620	70560	73500
110	52360	53900	55440	56980	58520	60060	61600	63140	64680	66220	67760	69300	70840	73920	77000
115	54740	56350	57960	59570	61180	62790	64400	66010	67620	69230	70840	72450	74060	77280	80500
120	57120	58800	60480	62160	63840	65520	67200	68880	70560	72240	73920	75600	77280	80640	84000
125	59500	61250	63000	64750	66500	68250	70000	71750	73500	75250	77000	78750	80500	84000	87500
130	61880	63700	65520	67340	69160	70980	72800	74620	76440	78260	80080	81900	83720	87360	91000
135	64260	66150	68040	69930	71820	73710	75600	77490	79380	81270	83160	85050	86940	90720	94500
140	66640	68600	70560	72520	74480	76440	78400	80360	82320	84280	86240	88200	90160	94080	98000
145	69020	71050	73080	75110	77140	79170	81200	83230	85260	87290	89320	91350	93380	97440	101500
150	71400	73500	75600	77700	79800	81900	84000	86100	88200	90300	92400	94500	96600	100800	105000
155	73780	75950	78120	80290	82460	84630	86800	88970	91140	93310	95480	97650	99820	104160	108500
160	76160	78400	80640	82880	85120	87360	89600	91840	94080	96320	98560	100800	103040	107520	112000
165	78540	80850	83160	85470	87780	90090	92400	94710	97020	99330	101640	103950	106260	110880	115500
170	80920	83300	85680	88060	90440	92820	95200	97580	99960	102340	104720	107100	109480	114240	119000
175	83300	85750	88200	90650	93100	95550	98000	100450	102900	105350	107800	110250	112700	117600	122500
180	85680	88200	90720	93240	95760	98280	100800	103320	105840	108360	110880	113400	115920	120960	126000
185	88060	90650	93240	95830	98420	101010	103600	106190	108780	111370	113960	116550	119140	124320	129500
190	90440	93100	95760	98420	101080	103740	106400	109060	111720	114380	117040	119700	122360	127680	133000
195	92820	95550	98280	101010	103740	106470	109200	111930	114660	117390	120120	122850	125580	131040	136500
200	95200	98000	100800	103600	106400	109200	112000	114800	117600	120400	123200	126000	128800	134400	140000

15 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	135																			
3½	158	184																		
4	180	210	240																	
4½	203	236	270	304																
5	225	263	300	338	375															
5½	248	289	330	371	413	454														
6	270	315	360	405	450	495	540													
6½	293	341	390	439	488	536	585	634												
7	315	368	420	473	525	578	630	683	735											
7½	338	394	450	506	563	619	675	731	788	844										
8	360	420	480	540	600	660	720	780	840	900	960									
8½	383	446	510	574	638	701	765	829	893	956	1020	1084								
9	405	473	540	608	675	743	810	878	945	1013	1080	1148	1215							
9½	428	499	570	641	713	784	855	926	998	1069	1140	1211	1283	1354						
10	450	525	600	675	750	825	900	975	1050	1125	1200	1275	1350	1425	1500					
10½	473	551	630	709	788	866	945	1024	1103	1181	1260	1339	1418	1496	1575	1654				
11	495	578	660	743	825	908	990	1073	1155	1238	1320	1403	1485	1568	1650	1733	1815			
11½	518	604	690	776	863	949	1035	1121	1208	1294	1380	1466	1553	1639	1725	1811	1898	1984		
12	540	630	720	810	900	990	1080	1170	1260	1350	1440	1530	1620	1710	1800	1890	1980	2070	2160	
12½	563	656	750	844	938	1031	1125	1219	1313	1406	1500	1594	1688	1781	1875	1969	2063	2156	2250	2344
13	585	683	780	878	975	1073	1170	1268	1365	1463	1560	1658	1755	1853	1950	2048	2145	2243	2340	2438
13½	608	709	810	911	1013	1114	1215	1316	1418	1519	1620	1721	1823	1924	2025	2126	2228	2329	2430	2531
14	630	734	840	945	1050	1156	1260	1365	1470	1575	1680	1785	1890	1995	2100	2205	2310	2415	2520	2625
14½	653	761	870	979	1088	1196	1305	1414	1523	1631	1740	1849	1958	2066	2175	2284	2393	2501	2610	2719
15	675	788	900	1013	1125	1238	1350	1463	1575	1688	1800	1912	2025	2138	2250	2363	2475	2588	2700	2813
15½	698	814	930	1046	1163	1279	1395	1511	1628	1744	1860	1976	2093	2209	2325	2441	2558	2674	2790	2906
16	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520	2640	2760	2880	3000
16½	743	866	990	1114	1238	1361	1485	1609	1733	1856	1980	2104	2228	2351	2475	2599	2723	2846	2970	3094
17	765	893	1020	1148	1275	1403	1530	1658	1785	1913	2040	2168	2295	2423	2550	2678	2805	2933	3060	3188
17½	788	919	1050	1181	1313	1444	1575	1706	1838	1969	2100	2231	2363	2494	2625	2756	2888	3019	3150	3281
18	810	945	1080	1215	1350	1485	1620	1755	1890	2025	2160	2295	2430	2565	2700	2835	2970	3105	3240	3375
18½	833	971	1110	1249	1388	1526	1665	1804	1943	2081	2220	2359	2498	2636	2775	2914	3053	3191	3330	3469
19	855	998	1140	1283	1425	1568	1710	1853	1995	2138	2280	2423	2565	2708	2850	2993	3135	3278	3420	3563
19½	878	1024	1170	1316	1463	1609	1755	1901	2048	2194	2340	2486	2633	2779	2925	3071	3218	3364	3510	3656
20	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3150	3300	3450	3600	3750
21	945	1103	1260	1418	1575	1733	1890	2048	2205	2363	2520	2678	2835	2993	3150	3308	3465	3623	3780	3938
22	990	1155	1320	1485	1650	1815	1980	2145	2310	2475	2640	2805	2970	3135	3300	3465	3630	3795	3960	4125
23	1035	1208	1380	1553	1725	1898	2070	2243	2415	2588	2760	2933	3105	3278	3450	3623	3795	3968	4140	4313
24	1080	1260	1440	1620	1800	1980	2160	2340	2520	2700	2880	3060	3240	3420	3600	3780	3960	4140	4320	4500
25	1125	1313	1500	1688	1875	2063	2250	2438	2625	2813	3000	3188	3375	3563	3750	3938	4125	4313	4500	4688
26	1170	1365	1560	1755	1950	2145	2340	2535	2730	2925	3120	3315	3510	3705	3900	4095	4290	4485	4680	4875
27	1215	1418	1620	1823	2025	2228	2430	2633	2835	3038	3240	3443	3645	3848	4050	4253	4455	4658	4860	5063
28	1260	1470	1680	1890	2100	2310	2520	2730	2940	3150	3360	3570	3780	3990	4200	4410	4620	4830	5040	5250
29	1305	1523	1740	1958	2175	2393	2610	2828	3045	3263	3480	3698	3915	4133	4350	4568	4785	5003	5220	5438
30	1350	1575	1800	2025	2250	2475	2700	2925	3150	3375	3600	3825	4050	4275	4500	4725	4950	5175	5400	5625
31	1395	1628	1860	2093	2325	2558	2790	3023	3255	3488	3720	3953	4185	4418	4650	4883	5115	5348	5580	5813
32	1440	1680	1920	2160	2400	2640	2880	3120	3360	3600	3840	4080	4320	4560	4800	5040	5280	5520	5760	6000
33	1485	1733	1980	2228	2475	2723	2970	3218	3465	3713	3960	4208	4455	4703	4950	5198	5445	5693	5940	6188
34	1530	1785	2040	2295	2550	2805	3060	3315	3570	3825	4080	4335	4590	4845	5100	5355	5610	5865	6120	6375
35	1575	1838	2100	2363	2625	2888	3150	3413	3675	3938	4200	4463	4725	4988	5250	5513	5775	6038	6300	6563
36	1620	1890	2160	2430	2700	2970	3240	3510	3780	4050	4320	4590	4860	5130	5400	5670	5940	6210	6480	6750
37	1665	1943	2220	2498	2775	3053	3330	3608	3885	4163	4440	4718	4995	5273	5550	5828	6105	6383	6660	6938
38	1710	1995	2280	2565	2850	3135	3420	3705	3990	4275	4560	4845	5130	5415	5700	5985	6270	6555	6840	7125
39	1755	2048	2340	2633	2925	3218	3510	3803	4095	4388	4680	4973	5265	5558	5850	6143	6435	6728	7020	7313
40	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300	6600	6900	7200	7500
41	1845	2153	2460	2768	3075	3383	3690	3998	4305	4613	4920	5228	5535	5843	6150	6458	6765	7073	7380	7688
42	1890	2205	2520	2835	3150	3465	3780	4095	4410	4725	5040	5355	5670	5985	6300	6615	6930	7245	7560	7875
43	1935	2258	2580	2903	3225	3548	3870	4193	4515	4838	5160	5483	5805	6128	6450	6773	7095	7418	7740	8063
44	1980	2310	2640	2970	3300	3630	3960	4290	4620	4950	5280	5610	5940	6270	6600	6930	7260	7590	7920	8250
45	2025	2363	2700	3038	3375	3713	4050	4388	4725	5063	5400	5738	6075	6413	6750	7088	7425	7763	8100	8438
46	2070	2415	2760	3105	3450	3795	4140	4485	4830	5175	5520	5865	6210	6555	6900	7245	7590	7935	8280	8625
47	2115	2468	2820	3173	3525	3878	4230	4583	4935	5288	5640	5993	6345	6698	7050	7403	7755	8108	8460	8813
48	2160	2520	2880	3240	3600	3960	4320	4680	5040	5400	5760	6120	6480	6840	7200	7560	7920	8280	8640	9000
49	2205	2573	2940	3308	3675	4043	4410	4778	5145	5513	5880	6248	6615	6983	7350	7718	8085	8453	8820	9188
50	2250	2625	3000	3375	3750	4125	4500	4875	5250	5625	6000	6375	6750	7125	7500	7875	8250	8625	9000	9375

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	2535																	
13½	2633	2734																
14	2730	2835	2940															
14½	2828	2936	3045	3154														
15	2925	3038	3150	3263	3375													
15½	3023	3139	3255	3371	3488	3604												
16	3120	3240	3360	3480	3600	3720	3840											
16½	3218	3341	3465	3589	3713	3836	3960	4084										
17	3315	3443	3570	3698	3825	3953	4080	4208	4335									
17½	3413	3544	3675	3806	3938	4069	4200	4331	4463	4594								
18	3510	3645	3780	3915	4050	4185	4320	4455	4590	4725	4860							
18½	3608	3746	3885	4024	4163	4301	4440	4579	4718	4856	4995							
19	3705	3848	3990	4133	4275	4418	4560	4703	4845	4988	5130	5415						
19½	3803	3948	4095	4241	4388	4534	4680	4826	4973	5119	5265	5558	5850					
20	3900	4050	4200	4350	4500	4650	4800	4950	5100	5250	5400	5700	6000					
21	4095	4253	4410	4568	4725	4883	5040	5198	5355	5513	5670	5985	6300	6615				
22	4290	4455	4620	4785	4950	5115	5280	5445	5610	5775	5940	6270	6600	6930	7260			
23	4485	4658	4830	5003	5175	5348	5520	5693	5865	6038	6210	6555	6900	7245	7590	7935		
24	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6840	7200	7560	7920	8280	8640	
25	4875	5063	5250	5438	5625	5813	6000	6188	6375	6563	6750	7125	7500	7875	8250	8625	9000	9375
26	5070	5265	5460	5655	5850	6045	6240	6435	6630	6825	7020	7410	7800	8190	8580	8970	9360	9750
27	5265	5468	5670	5873	6075	6278	6480	6683	6885	7088	7290	7695	8100	8505	8910	9315	9720	10125
28	5460	5670	5880	6090	6300	6510	6720	6930	7140	7350	7560	7980	8400	8820	9240	9660	10080	10500
29	5655	5873	6090	6308	6525	6743	6960	7178	7395	7613	7830	8265	8700	9135	9570	10005	10440	10875
30	5850	6075	6300	6525	6750	6975	7200	7425	7650	7875	8100	8550	9000	9450	9900	10350	10800	11250
31	6045	6278	6510	6743	6975	7208	7440	7673	7905	8138	8370	8835	9300	9765	10230	10695	11160	11625
32	6240	6480	6720	6960	7200	7440	7680	7920	8160	8400	8640	9120	9600	10080	10560	11040	11520	12000
33	6435	6683	6930	7178	7425	7673	7920	8168	8415	8663	8910	9405	9900	10395	10890	11385	11880	12375
34	6630	6885	7140	7395	7650	7905	8160	8415	8670	8925	9180	9690	10200	10710	11220	11730	12240	12750
35	6825	7088	7350	7613	7875	8138	8400	8663	8925	9188	9450	9975	10500	11025	11550	12075	12600	13125
36	7020	7290	7560	7830	8100	8370	8640	8910	9180	9450	9720	10260	10800	11340	11880	12420	12960	13500
37	7215	7493	7770	8048	8325	8603	8880	9158	9435	9713	9990	10545	11100	11655	12210	12765	13320	13875
38	7410	7695	7980	8265	8550	8835	9120	9405	9690	9975	10260	10830	11400	11970	12540	13110	13680	14250
39	7605	7898	8190	8483	8775	9068	9360	9653	9945	10238	10530	11115	11700	12285	12870	13455	14040	14625
40	7800	8100	8400	8700	9000	9300	9600	9900	10200	10500	10800	11400	12000	12600	13200	13800	14400	15000
41	7995	8303	8610	8918	9225	9533	9840	10148	10455	10763	11070	11685	12300	12915	13530	14145	14760	15375
42	8190	8505	8820	9135	9450	9765	10080	10395	10710	11025	11340	11970	12600	13230	13860	14490	15120	15750
43	8385	8708	9030	9353	9675	9998	10320	10643	10965	11288	11610	12255	12900	13545	14190	14835	15480	16125
44	8580	8910	9240	9570	9900	10230	10560	10890	11220	11550	11880	12540	13200	13860	14520	15180	15840	16500
45	8775	9113	9450	9788	10125	10463	10800	11138	11475	11813	12150	12825	13500	14175	14850	15525	16200	16875
46	8970	9315	9660	10005	10350	10695	11040	11385	11730	12075	12420	13110	13800	14490	15180	15870	16560	17250
47	9165	9518	9870	10223	10575	10928	11280	11633	11985	12338	12690	13395	14100	14805	15510	16215	16920	17625
48	9360	9720	10080	10440	10800	11160	11520	11880	12240	12600	12960	13680	14400	15120	15840	16560	17280	18000
49	9555	9923	10290	10658	11025	11393	11760	12128	12495	12863	13230	13965	14700	15435	16170	16905	17640	18375
50	9750	10125	10500	10875	11250	11625	12000	12375	12750	13125	13500	14250	15000	15750	16500	17250	18000	18750

15 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	6750	7125	7500	7875	8250	8625	9000	9375								
26	7020	7410	7800	8190	8580	8970	9360	9750	10140							
27	7290	7695	8100	8505	8910	9315	9720	10125	10530	10935						
28	7560	7980	8400	8820	9240	9660	10080	10500	10920	11340	11760					
29	7830	8265	8700	9135	9570	10005	10440	10875	11310	11745	12180	12615				
30	8100	8550	9000	9450	9900	10350	10800	11250	11700	12150	12600	13050	13500			
31	8370	8835	9300	9765	10230	10695	11160	11625	12090	12555	13020	13485	13950	14415		
32	8640	9120	9600	10080	10560	11040	11520	12000	12480	12960	13440	13920	14400	14880	15360	
33	8910	9405	9900	10395	10890	11385	11880	12375	12870	13365	13860	14355	14850	15345	15840	16335
34	9180	9690	10200	10710	11220	11730	12240	12750	13260	13770	14280	14790	15300	15810	16320	16830
35	9450	9975	10500	11025	11550	12075	12600	13125	13650	14175	14700	15225	15750	16275	16800	17325
36	9720	10260	10800	11340	11880	12420	12960	13500	14040	14580	15120	15660	16200	16740	17280	17820
37	9990	10545	11100	11655	12210	12765	13320	13875	14430	14985	15540	16095	16650	17205	17760	18315
38	10260	10830	11400	11970	12540	13110	13680	14250	14820	15390	15960	16530	17100	17670	18240	18810
39	10530	11115	11700	12285	12870	13455	14040	14625	15210	15795	16380	16965	17550	18135	18720	19305
40	10800	11400	12000	12600	13200	13800	14400	15000	15600	16200	16800	17400	18000	18600	19200	19800
41	11070	11685	12300	12915	13530	14145	14760	15375	15990	16605	17220	17835	18450	19065	19680	20295
42	11340	11970	12600	13230	13860	14490	15120	15750	16380	17010	17640	18270	18900	19530	20160	20790
43	11610	12255	12900	13545	14190	14835	15480	16125	16770	17415	18060	18705	19350	19995	20640	21285
44	11880	12540	13200	13860	14520	15180	15840	16500	17160	17820	18480	19140	19800	20460	21120	21780
45	12150	12825	13500	14175	14850	15525	16200	16875	17550	18225	18900	19575	20250	20925	21600	22275
46	12420	13110	13800	14490	15180	15870	16560	17250	17940	18630	19320	20010	20700	21390	22080	22770
47	12690	13395	14100	14805	15510	16215	16920	17625	18330	19035	19740	20445	21150	21855	22560	23265
48	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
49	13230	13965	14700	15435	16170	16905	17640	18375	19110	19845	20580	21315	22050	22785	23520	24255
50	13500	14250	15000	15750	16500	17250	18000	18750	19500	20250	21000	21750	22500	23250	24000	24750
51	14040	14820	15600	16380	17160	17940	18720	19500	20280	21060	21840	22620	23400	24180	24960	25740
54	14580	15390	16200	17010	17820	18630	19440	20250	21060	21870	22680	23490	24300	25110	25920	26730
56	15120	15960	16800	17640	18480	19320	20160	21000	21840	22680	23520	24360	25200	26040	26880	27720
58	15660	16530	17400	18270	19140	20010	20880	21750	22620	23490	24360	25230	26100	26970	27840	28710
60	16200	17100	18000	18900	19800	20700	21600	22500	23400	24300	25200	26100	27000	27900	28800	29700
62	16740	17670	18600	19530	20460	21390	22320	23250	24180	25110	26040	26970	27900	28830	29760	30690
64	17280	18240	19200	20160	21120	22080	23040	24000	24960	25920	26880	27840	28800	29760	30720	31680
66	17820	18810	19800	20790	21780	22770	23760	24750	25740	26730	27720	28710	29700	30690	31680	32670
68	18360	19380	20400	21420	22440	23460	24480	25500	26520	27540	28560	29580	30600	31620	32640	33660
70	18900	19950	21000	22050	23100	24150	25200	26250	27300	28350	29400	30450	31500	32550	33600	34650
72	19440	20520	21600	22680	23760	24840	25920	27000	28080	29160	30240	31320	32400	33480	34560	35640
74	19980	21090	22200	23310	24420	25530	26640	27750	28860	29970	31080	32190	33300	34410	35520	36630
76	20520	21660	22800	23940	25080	26220	27360	28500	29640	30780	31920	33060	34200	35340	36480	37620
78	21060	22230	23400	24570	25740	26910	28080	29250	30420	31590	32760	33930	35100	36270	37440	38610
80	21600	22800	24000	25200	26400	27600	28800	30000	31200	32400	33600	34800	36000	37200	38400	39600
85	22950	24225	25500	26775	28050	29325	30600	31875	33150	34425	35700	36975	38250	39525	40800	42075
90	24300	25650	27000	28350	29700	31050	32400	33750	35100	36450	37800	39150	40500	41850	43200	44550
95	25650	27075	28500	29925	31350	32775	34200	35625	37050	38475	39900	41325	42750	44175	45600	47025
100	27000	28500	30000	31500	33000	34500	36000	37500	39000	40500	42000	43500	45000	46500	48000	49500
105	28350	29925	31500	33075	34650	36225	37800	39375	40950	42525	44100	45675	47250	48825	50400	51975
110	29700	31350	33000	34650	36300	37950	39600	41250	42900	44550	46200	47850	49500	51150	52800	54450
115	31050	32775	34500	36225	37950	39675	41400	43125	44850	46575	48300	50025	51750	53475	55200	56925
120	32400	34200	36000	37800	39600	41400	43200	45000	46800	48600	50400	52200	54000	55800	57600	59400
125	33750	35625	37500	39375	41250	43125	45000	46875	48750	50625	52500	54375	56250	58125	60000	61875
130	35100	37050	39000	40950	42900	44850	46800	48750	50700	52650	54600	56550	58500	60450	62400	64350
135	36450	38475	40500	42525	44550	46575	48600	50625	52650	54675	56700	58725	60750	62775	64800	66825
140	37800	39900	42000	44100	46200	48300	50400	52500	54600	56700	58800	60900	63000	65100	67200	69300
145	39150	41325	43500	45675	47850	50025	52200	54375	56550	58725	60900	63075	65250	67425	69600	71775
150	40500	42750	45000	47250	49500	51750	54000	56250	58500	60750	63000	65250	67500	69750	72000	74250
155	41850	44175	46500	48825	51150	53475	55800	58125	60450	62775	65100	67425	69750	72075	74400	76725
160	43200	45600	48000	50400	52800	55200	57600	60000	62400	64800	67200	69600	72000	74400	76800	79200
165	44550	47025	49500	51975	54450	56925	59400	61875	64350	66825	69300	71775	74250	76725	79200	81675
170	45900	48450	51000	53550	56100	58650	61200	63750	66300	68850	71400	73950	76500	79050	81600	84150
175	47250	49875	52500	55125	57750	60375	63000	65625	68250	70875	73500	76125	78750	81375	84000	86625
180	48600	51300	54000	56700	59400	62100	64800	67500	70200	72900	75600	78300	81000	83700	86400	89100
185	49950	52725	55500	58275	61050	63825	66600	69375	72150	74925	77700	80475	83250	86025	88800	91575
190	51300	54150	57000	59850	62700	65550	68400	71250	74100	76950	79800	82650	85500	88350	91200	94050
195	52650	55575	58500	61425	64350	67275	70200	73125	76050	78975	81900	84825	87750	90675	93600	96525
200	54000	57000	60000	63000	66000	69000	72000	75000	78000	81000	84000	87000	90000	93000	96000	99000

	34	35	36	37	38	39	40	41	42	43	44	45	46	48	50
34	17340														
35	17850	18375													
36	18360	18900	19440												
37	18870	19425	19980	20535											
38	19380	19950	20520	21090	21660										
39	19890	20475	21060	21645	22230	22815									
40	20400	21000	21600	22200	22800	23400	24000								
41	20910	21525	22140	22755	23370	23985	24600	25215							
42	21420	22050	22680	23310	23940	24570	25200	25830	26460						
43	21930	22575	23220	23865	24510	25155	25800	26445	27090	27735					
44	22440	23100	23760	24420	25080	25740	26400	27060	27720	28380	29040				
45	22950	23625	24300	24975	25650	26325	27000	27675	28350	29025	29700	30375			
46	23460	24150	24840	25530	26220	26910	27600	28290	28980	29670	30360	31050	31740		
47	23970	24675	25380	26085	26790	27495	28200	28905	29610	30315	31020	31725	32430		
48	24480	25200	25920	26640	27360	28080	28800	29520	30240	30960	31680	32400	33120	34560	
49	24990	25725	26460	27195	27930	28665	29400	30135	30870	31605	32340	33075	33810	35280	
50	25500	26250	27000	27750	28500	29250	30000	30750	31500	32250	33000	33750	34500	36000	37500
52	26520	27300	28080	28860	29640	30420	31200	31980	32760	33540	34320	35100	35880	37440	39000
54	27540	28350	29160	29970	30780	31590	32400	33210	34020	34830	35640	36450	37260	38880	40500
56	28560	29400	30240	31080	31920	32760	33600	34440	35280	36120	36960	37800	38640	40320	42000
58	29580	30450	31320	32190	33060	33930	34800	35670	36540	37410	38280	39150	40020	41760	43500
60	30600	31500	32400	33300	34200	35100	36000	36900	37800	38700	39600	40500	41400	43200	45000
62	31620	32550	33480	34410	35340	36270	37200	38130	39060	39990	40920	41850	42780	44640	46500
64	32640	33600	34560	35520	36480	37440	38400	39360	40320	41280	42240	43200	44160	46080	48000
66	33660	34650	35640	36630	37620	38610	39600	40590	41580	42570	43560	44550	45540	47520	49500
68	34680	35700	36720	37740	38760	39780	40800	41820	42840	43860	44880	45900	46920	48960	51000
70	35700	36750	37800	38850	39900	40950	42000	43050	44100	45150	46200	47250	48300	50400	52500
72	36720	37800	38880	39960	41040	42120	43200	44280	45360	46440	47520	48600	49680	51840	54000
74	37740	38850	39960	41070	42180	43290	44400	45510	46620	47730	48840	49950	51060	53280	55500
76	38760	39900	41040	42180	43320	44460	45600	46740	47880	49020	50160	51300	52440	54720	57000
78	39780	40950	42120	43290	44460	45630	46800	47970	49140	50310	51480	52650	53820	56160	58500
80	40800	42000	43200	44400	45600	46800	48000	49200	50400	51600	52800	54000	55200	57600	60000
85	43350	44625	45900	47175	48450	49725	51000	52275	53550	54825	56100	57375	58650	61200	63750
90	45900	47250	48600	49950	51300	52650	54000	55350	56700	58050	59400	60750	62100	64800	67500
95	48450	49875	51300	52725	54150	55575	57000	58425	59850	61275	62700	64125	65550	68400	71250
100	51000	52500	54000	55500	57000	58500	60000	61500	63000	64500	66000	67500	69000	72000	75000
105	53550	55125	56700	58275	59850	61425	63000	64575	66150	67725	69300	70875	72450	75600	78750
110	56100	57750	59400	61050	62700	64350	66000	67650	69300	70950	72600	74250	75900	79200	82500
115	58650	60375	62100	63825	65550	67275	69000	70725	72450	74175	75900	77625	79350	82800	86250
120	61200	63000	64800	66600	68400	70200	72000	73800	75600	77400	79200	81000	82800	86400	90000
125	63750	65625	67500	69375	71250	73125	75000	76875	78750	80625	82500	84375	86250	90000	93750
130	66300	68250	70200	72150	74100	76050	78000	79950	81900	83850	85800	87750	89700	93600	97500
135	68850	70875	72900	74925	76950	78975	81000	83025	85050	87075	89100	91125	93150	97200	101250
140	71400	73500	75600	77700	79800	81900	84000	86100	88200	90300	92400	94500	96600	100800	105000
145	73950	76125	78300	80475	82650	84825	87000	89175	91350	93525	95700	97875	100050	104400	108750
150	76500	78750	81000	83250	85500	87750	90000	92250	94500	96750	99000	101250	103500	108000	112500
155	79050	81375	83700	86025	88350	90675	93000	95325	97650	99975	102300	104625	106950	111600	116250
160	81600	84000	86400	88800	91200	93600	96000	98400	100800	103200	105600	108000	110400	115200	120000
165	84150	86625	89100	91575	94050	96525	99000	101475	103950	106425	108900	111375	113850	118800	123750
170	86700	89250	91800	94350	96900	99450	102000	104550	107100	109650	112200	114750	117300	122400	127500
175	89250	91875	94500	97125	99750	102375	105000	107625	110250	112875	115500	118125	120750	126000	131250
180	91800	94500	97200	99900	102600	105300	108000	110700	113400	116100	118800	121500	124200	129600	135000
185	94350	97125	99900	102675	105450	108225	111000	113775	116550	119325	122100	124875	127650	133200	138750
190	96900	99750	102600	105450	108300	111150	114000	116850	119700	122550	125400	128250	131100	136800	142500
195	99450	102375	105300	108225	111150	114075	117000	119925	122850	125775	128700	131625	134550	140400	146250
200	102000	105000	108000	111000	114000	117000	120000	123000	126000	129000	132000	135000	138000	144000	150000

16 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	144																			
3½	168	196																		
4	192	224	256																	
4½	216	252	288	324																
5	240	280	320	360	400															
5½	264	308	352	396	440	484														
6	288	336	384	432	480	528	576													
6½	312	364	416	468	520	572	624	676												
7	336	392	448	504	560	616	672	728	784											
7½	360	420	480	540	600	660	720	780	840	900										
8	384	448	512	576	640	704	768	832	896	960	1024									
8½	408	476	544	612	680	748	816	884	952	1020	1088	1156								
9	432	504	576	648	720	792	864	936	1008	1080	1152	1224	1296							
9½	456	532	608	684	760	836	912	988	1064	1140	1216	1292	1368	1444						
10	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600					
10½	504	588	672	756	840	924	1008	1092	1176	1260	1344	1428	1512	1596	1680	1764				
11	528	616	704	792	880	968	1056	1144	1232	1320	1408	1496	1584	1672	1760	1848	1936			
11½	552	644	736	828	920	1012	1104	1196	1288	1380	1472	1564	1656	1748	1840	1932	2024	2116		
12	576	672	768	864	960	1056	1152	1248	1344	1440	1536	1632	1728	1824	1920	2016	2112	2208	2304	
12½	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
13	624	728	832	936	1040	1144	1248	1352	1456	1560	1664	1768	1872	1976	2080	2184	2288	2392	2496	2600
13½	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	2700
14	672	784	896	1008	1120	1232	1344	1456	1568	1680	1792	1904	2016	2128	2240	2352	2464	2576	2688	2800
14½	696	812	928	1044	1160	1276	1392	1508	1624	1740	1856	1972	2088	2204	2320	2436	2552	2668	2784	2900
15	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520	2640	2760	2880	3000
15½	744	868	992	1116	1240	1364	1488	1612	1736	1860	1984	2108	2232	2356	2480	2604	2728	2852	2976	3100
16	768	896	1024	1152	1280	1408	1536	1664	1792	1920	2048	2176	2304	2432	2560	2688	2816	2944	3072	3200
16½	792	920	1056	1188	1320	1452	1584	1716	1848	1980	2112	2244	2376	2508	2640	2772	2904	3036	3168	3300
17	816	952	1088	1224	1360	1496	1632	1768	1904	2040	2176	2312	2448	2584	2720	2856	2992	3128	3264	3400
17½	840	980	1120	1260	1400	1540	1680	1820	1960	2100	2240	2380	2520	2660	2800	2940	3080	3220	3360	3500
18	864	1008	1152	1296	1440	1584	1728	1872	2016	2160	2304	2448	2592	2736	2880	3024	3168	3312	3456	3600
18½	888	1036	1184	1332	1480	1628	1776	1924	2072	2220	2368	2516	2664	2812	2960	3108	3256	3404	3552	3700
19	912	1064	1216	1368	1520	1672	1824	1976	2128	2280	2432	2584	2736	2888	3040	3192	3344	3496	3648	3800
19½	936	1092	1248	1404	1560	1716	1872	2028	2184	2340	2496	2652	2808	2964	3120	3276	3432	3588	3744	3900
20	960	1120	1280	1440	1600	1760	1920	2080	2240	2400	2560	2720	2880	3040	3200	3360	3520	3680	3840	4000
21	1008	1176	1344	1512	1680	1848	2016	2184	2352	2520	2688	2856	3024	3192	3360	3528	3696	3864	4032	4200
22	1056	1232	1408	1584	1760	1936	2112	2288	2464	2640	2816	2992	3168	3344	3520	3696	3872	4048	4224	4400
23	1104	1288	1472	1656	1840	2024	2218	2392	2576	2760	2944	3128	3312	3496	3680	3864	4048	4232	4416	4600
24	1152	1344	1536	1728	1920	2112	2314	2496	2688	2880	3072	3264	3456	3648	3840	4032	4224	4416	4608	4800
25	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
26	1248	1456	1664	1872	2080	2288	2496	2704	2912	3120	3328	3536	3744	3952	4160	4368	4576	4784	4992	5200
27	1296	1512	1728	1944	2160	2376	2592	2808	3024	3240	3456	3672	3888	4104	4320	4536	4752	4968	5184	5400
28	1344	1568	1792	2016	2240	2464	2688	2912	3136	3360	3584	3808	4032	4256	4480	4704	4928	5152	5376	5600
29	1392	1624	1856	2088	2320	2552	2784	3016	3248	3480	3712	3944	4176	4408	4640	4872	5104	5336	5568	5800
30	1440	1680	1920	2160	2400	2640	2880	3120	3360	3600	3840	4080	4320	4560	4800	5040	5280	5520	5760	6000
31	1488	1736	1984	2232	2480	2728	2976	3224	3472	3720	3968	4216	4464	4712	4960	5208	5456	5704	5952	6200
32	1536	1792	2048	2304	2560	2816	3072	3328	3584	3840	4096	4352	4608	4864	5120	5376	5632	5888	6144	6400
33	1584	1848	2112	2376	2640	2904	3168	3432	3696	3960	4224	4488	4752	5016	5280	5544	5808	6072	6336	6600
34	1632	1904	2176	2448	2720	2992	3264	3536	3808	4080	4352	4624	4896	5168	5440	5712	5984	6256	6528	6800
35	1680	1960	2240	2520	2800	3080	3360	3640	3920	4200	4480	4760	5040	5320	5600	5880	6160	6440	6720	7000
36	1728	2016	2304	2592	2880	3168	3456	3744	4032	4320	4608	4896	5184	5472	5760	6048	6336	6624	6912	7200
37	1776	2072	2368	2664	2960	3256	3552	3848	4144	4440	4736	5032	5328	5624	5920	6216	6512	6808	7104	7400
38	1824	2128	2432	2736	3040	3344	3648	3952	4256	4560	4864	5168	5472	5776	6080	6384	6688	6992	7296	7600
39	1872	2184	2496	2808	3120	3432	3744	4056	4368	4680	4992	5304	5616	5928	6240	6552	6864	7176	7488	7800
40	1920	2240	2560	2880	3200	3520	3840	4160	4480	4800	5120	5440	5760	6080	6400	6720	7040	7360	7680	8000
41	1968	2296	2624	2952	3280	3608	3936	4264	4592	4920	5248	5576	5904	6232	6560	6888	7216	7544	7872	8200
42	2016	2352	2688	3024	3360	3696	4032	4368	4704	5040	5376	5712	6048	6384	6720	7056	7392	7728	8064	8400
43	2064	2408	2752	3096	3440	3784	4128	4472	4816	5160	5504	5848	6192	6536	6880	7224	7568	7912	8256	8600
44	2112	2464	2816	3168	3520	3872	4224	4576	4928	5280	5632	5984	6336	6688	7040	7392	7744	8096	8448	8800
45	2160	2520	2880	3240	3600	3960	4320	4680	5040	5400	5760	6120	6480	6840	7200	7560	7920	8280	8640	9000
46	2208	2576	2944	3312	3680	4048	4416	4784	5152	5520	5888	6256	6624	6992	7360	7728	8096	8464	8832	9200
47	2256	2632	3008	3384	3760	4136	4512	4888	5264	5640	6016	6392	6768	7144	7520	7896	8272	8648	9024	9400
48	2304	2688	3072	3456	3840	4224	4608	4992	5376	5760	6144	6528	6912	7296	7680	8064	8448	8832	9216	9600
49	2352	2744	3136	3528	3920	4312	4704	5096	5488	5880	6272	6664	7056	7448	7840	8232	8624	9016	9408	9800
50	2400	2800	3200	3600	4000	4400	4800	5200	5600	6000	6400	6800	7200	7600	8000	8400	8800	9200	9600	10000

	13	13½	14	14½	15	15½	16	16½	17	17½	18	19	20	21	22	23	24	25
13	2704																	
13½	2808	2916																
14	2912	3024	3136															
14½	3016	3132	3248	3364														
15	3120	3240	3360	3480	3600													
15½	3224	3348	3472	3596	3720	3844												
16	3328	3456	3584	3712	3840	3968	4096											
16½	3432	3564	3696	3828	3960	4092	4224	4356										
17	3536	3672	3808	3944	4080	4216	4352	4488	4624									
17½	3640	3780	3920	4060	4200	4340	4480	4620	4760	4900								
18	3744	3888	4032	4176	4320	4464	4608	4752	4896	5040	5184							
18½	3848	3996	4144	4292	4440	4588	4736	4884	5032	5180	5328							
19	3952	4104	4256	4408	4560	4712	4864	5016	5168	5320	5472	5776						
19½	4056	4212	4368	4524	4680	4836	4992	5148	5304	5460	5616	5928						
20	4160	4320	4480	4640	4800	4960	5120	5280	5440	5600	5760	6080	6400					
21	4368	4536	4704	4872	5040	5208	5376	5544	5712	5880	6048	6384	6720	7056				
22	4576	4752	4928	5104	5280	5456	5632	5808	5984	6160	6336	6688	7040	7392	7744			
23	4784	4968	5152	5336	5520	5704	5888	6072	6256	6440	6624	6992	7360	7728	8096	8464		
24	4992	5184	5376	5568	5760	5952	6144	6336	6528	6720	6912	7296	7680	8064	8448	8832	9216	
25	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000	7200	7600	8000	8400	8800	9200	9600	10000
26	5408	5616	5824	6032	6240	6448	6656	6864	7072	7280	7488	7904	8320	8736	9152	9568	9984	10400
27	5616	5832	6048	6264	6480	6696	6912	7128	7344	7560	7776	8208	8640	9072	9504	9936	10368	10800
28	5824	6048	6272	6496	6720	6944	7168	7392	7616	7840	8064	8512	8960	9408	9856	10304	10752	11200
29	6032	6264	6496	6728	6960	7192	7424	7656	7888	8120	8352	8816	9280	9744	10208	10672	11136	11600
30	6240	6480	6720	6960	7200	7440	7680	7920	8160	8400	8640	9120	9600	10080	10560	11040	11520	12000
31	6448	6696	6944	7192	7440	7688	7936	8184	8432	8680	8928	9424	9920	10416	10912	11408	11904	12400
32	6656	6912	7168	7424	7680	7936	8192	8448	8704	8960	9216	9728	10240	10752	11264	11776	12288	12800
33	6864	7128	7392	7656	7920	8184	8448	8712	8976	9240	9504	10032	10560	11088	11616	12144	12672	13200
34	7072	7344	7616	7888	8160	8432	8704	8976	9248	9520	9792	10336	10880	11424	11968	12512	13056	13600
35	7280	7560	7840	8120	8400	8680	8960	9240	9520	9800	10080	10640	11200	11760	12320	12880	13440	14000
36	7488	7776	8064	8352	8640	8928	9216	9504	9792	10080	10368	10944	11520	12096	12672	13248	13824	14400
37	7696	7992	8288	8584	8880	9176	9472	9768	10064	10360	10656	11248	11840	12432	13024	13616	14208	14800
38	7904	8208	8512	8816	9120	9424	9728	10032	10336	10640	10944	11552	12160	12768	13376	13984	14592	15200
39	8112	8424	8736	9048	9360	9672	9984	10296	10608	10920	11232	11856	12480	13104	13728	14352	14976	15600
40	8320	8640	8960	9280	9600	9920	10240	10560	10880	11200	11520	12160	12800	13440	14080	14720	15360	16000
41	8528	8856	9184	9512	9840	10168	10496	10824	11152	11480	11808	12464	13120	13776	14432	15088	15744	16400
42	8736	9072	9408	9744	10080	10416	10752	11088	11424	11760	12096	12768	13440	14112	14784	15456	16128	16800
43	8944	9288	9632	9976	10320	10664	11008	11352	11696	12040	12384	13072	13760	14448	15136	15824	16512	17200
44	9152	9504	9856	10208	10560	10912	11264	11616	11968	12320	12672	13376	14080	14784	15488	16192	16896	17600
45	9360	9720	10080	10440	10800	11160	11520	11880	12240	12600	12960	13680	14400	15120	15840	16560	17280	18000
46	9568	9936	10304	10672	11040	11408	11776	12144	12512	12880	13248	13984	14720	15456	16192	16928	17664	18400
47	9776	10152	10528	10904	11280	11656	12032	12408	12784	13160	13536	14288	15040	15792	16544	17296	18048	18800
48	9984	10368	10752	11136	11520	11904	12288	12672	13056	13440	13824	14592	15360	16128	16896	17664	18432	19200
49	10192	10584	10976	11368	11760	12152	12544	12936	13328	13720	14112	14896	15680	16464	17248	18032	18816	19600
50	10400	10800	11200	11600	12000	12400	12800	13200	13600	14000	14400	15200	16000	16800	17600	18400	19200	20000

16 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	7200	7600	8000	8400	8800	9200	9600	10000								
26	7488	7904	8320	8736	9152	9568	9984	10400	10816							
27	7776	8208	8640	9072	9504	9936	10368	10800	11232	11664						
28	8064	8512	8960	9408	9856	10304	10752	11200	11648	12096	12544					
29	8352	8816	9280	9744	10208	10672	11136	11600	12064	12528	12992	13456				
30	8640	9120	9600	10080	10560	11040	11520	12000	12480	12960	13440	13920	14400			
31	8928	9424	9920	10416	10912	11408	11904	12400	12896	13392	13888	14384	14880	15376		
32	9216	9728	10240	10752	11264	11776	12288	12800	13312	13824	14336	14848	15360	15872	16384	
33	9504	10032	10560	11088	11616	12144	12672	13200	13728	14256	14784	15312	15840	16368	16896	17424
34	9792	10336	10880	11424	11968	12512	13056	13600	14144	14688	15232	15776	16320	16864	17408	17952
35	10080	10640	11200	11760	12320	12880	13440	14000	14560	15120	15680	16240	16800	17360	17920	18480
36	10368	10944	11520	12096	12672	13248	13824	14400	14976	15552	16128	16704	17280	17856	18432	19008
37	10656	11248	11840	12432	13024	13616	14208	14800	15392	15984	16576	17168	17760	18352	18944	19536
38	10944	11552	12160	12768	13376	13984	14592	15200	15808	16416	17024	17632	18240	18848	19456	20064
39	11232	11856	12480	13104	13728	14352	14976	15600	16224	16848	17472	18096	18720	19344	19968	20592
40	11520	12160	12800	13440	14080	14720	15360	16000	16640	17280	17920	18560	19200	19840	20480	21120
41	11808	12464	13120	13776	14432	15088	15744	16400	17056	17712	18368	19024	19680	20336	20992	21648
42	12096	12768	13440	14112	14784	15456	16128	16800	17472	18144	18816	19488	20160	20832	21504	22176
43	12384	13072	13760	14448	15136	15824	16512	17200	17888	18576	19264	19952	20640	21328	22016	22704
44	12672	13376	14080	14784	15488	16192	16896	17600	18304	19008	19712	20416	21120	21824	22528	23232
45	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
46	13248	13984	14720	15456	16192	16928	17664	18400	19136	19872	20608	21344	22080	22816	23552	24288
47	13536	14288	15040	15792	16544	17296	18048	18800	19552	20304	21056	21808	22560	23312	24064	24816
48	13824	14592	15360	16128	16896	17664	18432	19200	19968	20736	21504	22272	23040	23808	24576	25344
49	14112	14896	15680	16464	17248	18032	18816	19600	20384	21168	21952	22736	23520	24304	25088	25872
50	14400	15200	16000	16800	17600	18400	19200	20000	20800	21600	22400	23200	24000	24800	25600	26400
51	14796	15608	16440	17272	18104	18936	19768	20600	21432	22264	23096	23928	24760	25592	26424	27256
52	15152	16016	16880	17744	18608	19472	20336	21200	22064	22928	23792	24656	25520	26384	27248	28112
53	15504	16400	17296	18192	19088	19984	20880	21776	22672	23568	24464	25360	26256	27152	28048	28944
54	15856	16768	17680	18592	19504	20416	21328	22240	23152	24064	24976	25888	26800	27712	28624	29536
55	16208	17136	18064	18992	19920	20848	21776	22704	23632	24560	25488	26416	27344	28272	29200	30128
56	16560	17504	18448	19392	20336	21280	22224	23168	24112	25056	25992	26928	27864	28800	29736	30672
57	16912	17872	18832	19792	20752	21712	22672	23632	24592	25552	26512	27472	28432	29392	30352	31312
58	17264	18240	19216	20192	21168	22144	23120	24096	25072	26048	27024	28000	28976	29952	30928	31904
59	17616	18608	19600	20592	21584	22576	23568	24560	25552	26544	27536	28528	29520	30512	31504	32496
60	17968	18976	19984	20992	21992	22992	23992	24992	25992	26992	27992	28992	29992	30992	31992	32992
61	18320	19344	20368	21392	22416	23440	24464	25488	26512	27536	28560	29584	30608	31632	32656	33680
62	18672	19712	20752	21792	22832	23872	24912	25952	26992	28032	29072	30112	31152	32192	33232	34272
63	19024	20080	21136	22192	23248	24304	25360	26416	27472	28528	29584	30640	31696	32752	33808	34864
64	19376	20448	21520	22592	23664	24736	25808	26880	27952	29024	30096	31168	32240	33312	34384	35456
65	19728	20816	21904	22992	24080	25168	26256	27344	28432	29520	30608	31696	32784	33872	34960	36048
66	20080	21184	22288	23392	24496	25600	26704	27808	28912	30016	31120	32224	33328	34432	35536	36640
67	20432	21552	22672	23792	24912	26032	27152	28272	29392	30512	31632	32752	33872	34992	36112	37232
68	20784	21920	23056	24192	25328	26464	27600	28736	29872	31008	32144	33280	34416	35552	36688	37824
69	21136	22296	23456	24616	25776	26936	28096	29256	30416	31576	32736	33896	35056	36216	37376	38536
70	21488	22664	23840	25016	26192	27368	28544	29720	30896	32072	33248	34424	35600	36776	37952	39128
71	21840	23032	24224	25416	26608	27800	28992	30184	31376	32568	33760	34952	36144	37336	38528	39720
72	22192	23400	24608	25816	27024	28232	29440	30648	31856	33064	34272	35480	36688	37896	39104	40312
73	22544	23768	24992	26216	27440	28664	29888	31112	32336	33560	34784	36008	37232	38456	39680	40904
74	22896	24136	25376	26616	27856	29096	30336	31576	32816	34056	35296	36536	37776	39016	40256	41496
75	23248	24504	25760	27016	28272	29528	30784	32040	33296	34552	35808	37064	38320	39576	40832	42088
76	23600	24872	26144	27416	28688	29960	31232	32504	33776	35048	36320	37592	38864	40136	41408	42680
77	23952	25240	26528	27816	29104	30392	31680	32968	34256	35544	36832	38120	39408	40696	41984	43272
78	24304	25608	26912	28216	29520	30824	32128	33432	34736	36040	37344	38648	39952	41256	42560	43864
79	24656	25976	27296	28616	29936	31256	32576	33896	35216	36536	37856	39176	40496	41816	43136	44456
80	25008	26344	27680	29016	30352	31688	33024	34360	35696	37032	38368	39704	41040	42376	43712	45048
81	25360	26712	28064	29416	30768	32120	33472	34824	36176	37528	38880	40232	41584	42936	44288	45640
82	25712	27080	28448	29816	31184	32552	33920	35288	36656	38024	39392	40760	42128	43496	44864	46232
83	26064	27448	28832	30216	31600	32984	34368	35752	37136	38520	39904	41288	42672	44056	45440	46824
84	26416	27816	29216	30616	32016	33416	34816	36216	37616	39016	40416	41816	43216	44616	46016	47416
85	26768	28184	29600	31016	32432	33848	35264	36680	38096	39512	40928	42344	43760	45176	46592	48008
86	27120	28552	29984	31416	32848	34280	35712	37144	38576	40008	41440	42872	44304	45736	47168	48600
87	27472	28920	30368	31816	33264	34712	36160	37608	39056	40504	41952	43400	44848	46296	47744	49192
88	27824	29288	30752	32216	33680	35144	36608	38072	39536	41000	42464	43928	45392	46856	48320	49784
89	28176	29656	31136	32616	34104	35592	37080	38568	40056	41544	43032	44520	46008	47496	48984	50472
90	28528	30024	31520	33024	34528	36032	37536	39040	40544	42048	43552	45056	46560	48064	49568	51072
91	28880	30392	31904	33424	34944	36464	37984	39504	41024	42544	44064	45584	47104	48624	50144	51664
92	29232	30760	32288	33824	35360	36896	38432	39968	41504	43040	44576	46112	47648	49184	50720	52256
93	29584	31128	32672	34224	35776	37328	38880	40432	41984	43536	45088	46640	48192	49744	51296	52848
94	29936	31496	33056	34624	36192	37760	39328	40896	42464	44032	45600	47168	48736	50304	51872	53440
95	30288	31864	33440	35024	36608	38192	39776	41360	42944	44528	46112	47696	49280	50864	52448	54032
96	30640	32232	33824	35424	37024	38624	40224	41824	43424	45024	46624	48224	49824	51424		

	34	35	36	37	38	39	40	41	42	43	44	45	46	48	50
34	18496														
35	19040	19600													
36	19584	20160	20736												
37	20128	20720	21312	21904											
38	20672	21280	21888	22496	23104										
39	21216	21840	22464	23088	23712	24336									
40	21760	22400	23040	23680	24320	24960	25600								
41	22304	22960	23616	24272	24928	25584	26240	26896							
42	22848	23520	24192	24864	25536	26208	26880	27552	28224						
43	23392	24080	24768	25456	26144	26832	27520	28208	28896	29584					
44	23936	24640	25344	26048	26752	27456	28160	28864	29568	30272	30976				
45	24480	25200	25920	26640	27360	28080	28800	29520	30240	30960	31680	32400			
46	25024	25760	26496	27232	27968	28704	29440	30176	30912	31648	32384	33120	33856		
47	25568	26320	27072	27824	28576	29328	30080	30832	31584	32336	33088	33840	34592		
48	26112	26880	27648	28416	29184	29952	30720	31488	32256	33024	33792	34560	35328	36096	
49	26656	27440	28224	29008	29792	30576	31360	32144	32928	33712	34496	35280	36064	36848	37632
50	27200	28000	28800	29600	30400	31200	32000	32800	33600	34400	35200	36000	36800	37600	38400
52	28288	29120	29952	30784	31616	32448	33280	34112	34944	35776	36608	37440	38272	39104	39936
54	29376	30240	31104	31968	32832	33696	34560	35424	36288	37152	38016	38880	39744	40608	41472
56	30464	31360	32256	33152	34048	34944	35840	36736	37632	38528	39424	40320	41216	42112	43008
58	31552	32480	33408	34336	35264	36192	37120	38048	38976	39904	40832	41760	42688	43616	44544
60	32640	33600	34560	35520	36480	37440	38400	39360	40320	41280	42240	43200	44160	45120	46080
62	33728	34720	35712	36704	37696	38688	39680	40672	41664	42656	43648	44640	45632	46624	47616
64	34816	35840	36864	37888	38912	39936	40960	41984	43008	44032	45056	46080	47104	48128	49152
66	35904	36960	38016	39072	40128	41184	42240	43296	44352	45408	46464	47520	48576	49632	50688
68	36992	38080	39168	40256	41344	42432	43520	44608	45696	46784	47872	48960	50048	51136	52224
70	38080	39200	40320	41440	42560	43680	44800	45920	47040	48160	49280	50400	51520	52640	53760
72	39168	40320	41472	42624	43776	44928	46080	47232	48384	49536	50688	51840	52992	54144	55296
74	40256	41440	42624	43808	44992	46176	47360	48544	49728	50912	52096	53280	54464	55648	56832
76	41344	42560	43776	44992	46208	47424	48640	49856	51072	52288	53504	54720	55936	57152	58368
78	42432	43680	44928	46176	47424	48672	49920	51168	52416	53664	54912	56160	57408	58656	59904
80	43520	44800	46080	47360	48640	49920	51200	52480	53760	55040	56320	57600	58880	60160	61440
85	46240	47600	48960	50320	51680	53040	54400	55760	57120	58480	59840	61200	62560	63920	65280
90	48960	50400	51840	53280	54720	56160	57600	59040	60480	61920	63360	64800	66240	67680	69120
95	51680	53200	54720	56240	57760	59280	60800	62320	63840	65360	66880	68400	69920	71440	72960
100	54400	56000	57600	59200	60800	62400	64000	65600	67200	68800	70400	72000	73600	75200	76800
105	57120	58800	60480	62160	63840	65520	67200	68880	70560	72240	73920	75600	77280	78960	80640
110	59840	61600	63360	65120	66880	68640	70400	72160	73920	75680	77440	79200	80960	82720	84480
115	62560	64400	66240	68080	69920	71760	73600	75440	77280	79120	80960	82800	84640	86480	88320
120	65280	67200	69120	71040	72960	74880	76800	78720	80640	82560	84480	86400	88320	90240	92160
125	68000	70000	72000	74000	76000	78000	80000	82000	84000	86000	88000	90000	92000	94000	96000
130	70720	72800	74880	76960	79040	81120	83200	85280	87360	89440	91520	93600	95680	97760	99840
135	73440	75600	77760	79920	82080	84240	86400	88560	90720	92880	95040	97200	99360	101520	103680
140	76160	78400	80640	82880	85120	87360	89600	91840	94080	96320	98560	100800	103040	105280	107520
145	78880	81200	83520	85840	88160	90480	92800	95120	97440	99760	102080	104400	106720	109040	111360
150	81600	84000	86400	88800	91200	93600	96000	98400	100800	103200	105600	108000	110400	112800	115200
155	84320	86800	89280	91760	94240	96720	99200	101680	104160	106640	109120	111600	114080	116560	119040
160	87040	89600	92160	94720	97280	99840	102400	104960	107520	110080	112640	115200	117760	120320	122880
165	89760	92400	95040	97680	100320	102960	105600	108240	110880	113520	116160	118800	121440	124080	126720
170	92480	95200	97920	100640	103360	106080	108800	111520	114240	116960	119680	122400	125120	127840	130560
175	95200	98000	100800	103600	106400	109200	112000	114800	117600	120400	123200	126000	128800	131600	134400
180	97920	100800	103680	106560	109440	112320	115200	118080	120960	123840	126720	129600	132480	135360	138240
185	100640	103600	106560	109520	112480	115440	118400	121360	124320	127280	130240	133200	136160	139120	142080
190	103360	106400	109440	112480	115520	118560	121600	124640	127680	130720	133760	136800	139840	142880	145920
195	106080	109200	112320	115440	118560	121680	124800	127920	131040	134160	137280	140400	143520	146640	149760
200	108800	112000	115200	118400	121600	124800	128000	131200	134400	137600	140800	144000	147200	150400	153600

18 CUBICAL CONTENTS OF ROOMS 25X50 AND

	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½
3	162																			
3½	189	221																		
4	216	252	288																	
4½	243	284	324																	
5	270	315	360	405	450															
5½	297	347	396	446	495	545														
6	324	378	432	486	540	594	648													
6½	351	410	468	527	585	644	702	761												
7	378	441	504	567	630	693	756	819	882											
7½	405	473	540	608	675	743	810	878	945	1013										
8	432	504	576	648	720	792	864	936	1008	1080	1152									
8½	459	536	612	689	765	842	918	995	1071	1148	1224	1301								
9	486	567	648	729	810	891	972	1053	1134	1215	1296	1377	1458							
9½	513	599	684	770	855	941	1026	1112	1197	1283	1368	1454	1539	1625						
10	540	630	720	810	900	990	1080	1170	1260	1350	1440	1530	1620	1710	1800					
10½	567	662	756	851	945	1040	1134	1229	1323	1418	1512	1607	1701	1796	1890	1985				
11	594	693	792	891	990	1089	1188	1287	1386	1485	1584	1683	1782	1881	1980	2079	2178			
11½	621	725	828	932	1035	1139	1242	1346	1449	1553	1656	1760	1863	1967	2070	2174	2277	2381		
12	648	756	864	972	1080	1188	1296	1404	1512	1620	1728	1836	1944	2052	2160	2268	2376	2484	2592	
12½	675	788	900	1013	1125	1238	1350	1463	1575	1688	1800	1913	2025	2138	2250	2363	2476	2588	2700	2813
13	702	819	936	1053	1170	1287	1404	1521	1638	1755	1872	1989	2106	2223	2340	2457	2574	2691	2808	2925
13½	729	851	972	1094	1215	1337	1458	1580	1701	1823	1944	2066	2187	2309	2430	2552	2673	2795	2916	3038
14	756	882	1008	1134	1260	1386	1512	1638	1764	1890	2016	2142	2268	2394	2520	2646	2772	2898	3024	3150
14½	783	914	1044	1175	1305	1436	1566	1697	1827	1958	2088	2219	2349	2480	2610	2741	2871	3002	3132	3263
15	810	945	1080	1215	1350	1485	1620	1755	1890	2025	2160	2295	2430	2565	2700	2835	2970	3105	3240	3375
15½	837	977	1116	1256	1395	1535	1674	1814	1953	2093	2232	2372	2511	2651	2790	2930	3069	3209	3348	3488
16	864	1008	1152	1296	1440	1584	1728	1872	2016	2160	2304	2448	2592	2736	2880	3024	3168	3312	3456	3600
16½	891	1040	1188	1337	1485	1634	1782	1931	2079	2228	2376	2525	2673	2822	2970	3119	3267	3416	3564	3713
17	918	1071	1224	1377	1530	1683	1836	1989	2142	2295	2448	2601	2754	2907	3060	3213	3366	3519	3672	3825
17½	945	1103	1260	1418	1575	1732	1890	2048	2205	2363	2520	2678	2835	2993	3150	3308	3465	3623	3780	3938
18	972	1134	1296	1458	1620	1782	1944	2106	2268	2430	2592	2754	2916	3078	3240	3402	3564	3726	3888	4050
18½	999	1166	1332	1499	1665	1832	1998	2165	2331	2498	2664	2831	2997	3164	3330	3497	3663	3830	3996	4163
19	1026	1197	1368	1539	1710	1881	2052	2223	2394	2565	2736	2907	3078	3249	3420	3591	3762	3933	4104	4275
19½	1053	1229	1404	1580	1755	1931	2106	2282	2457	2633	2808	2984	3159	3335	3510	3686	3861	4037	4212	4388
20	1080	1260	1440	1620	1800	1980	2160	2340	2520	2700	2880	3060	3240	3420	3600	3780	3960	4140	4320	4500
21	1134	1323	1512	1701	1890	2079	2268	2457	2646	2835	3024	3213	3402	3591	3780	3969	4158	4347	4536	4725
22	1188	1386	1584	1782	1980	2178	2376	2574	2772	2970	3168	3366	3564	3762	3960	4158	4356	4554	4752	4950
23	1242	1449	1656	1863	2070	2277	2484	2691	2898	3105	3312	3519	3726	3933	4140	4347	4554	4761	4968	5175
24	1296	1512	1728	1944	2160	2376	2592	2808	3024	3240	3456	3672	3888	4104	4320	4536	4752	4968	5184	5400
25	1350	1575	1800	2025	2250	2475	2700	2925	3150	3375	3600	3825	4050	4275	4500	4725	4950	5175	5400	5625
26	1404	1638	1872	2106	2340	2574	2808	3042	3276	3510	3744	3978	4212	4446	4680	4914	5148	5382	5616	5850
27	1458	1701	1944	2187	2430	2673	2916	3159	3402	3645	3888	4131	4374	4617	4860	5103	5346	5589	5832	6075
28	1512	1764	2016	2268	2520	2772	3024	3276	3528	3780	4032	4284	4536	4788	5040	5292	5544	5796	6048	6300
29	1566	1827	2088	2349	2610	2871	3132	3393	3654	3915	4176	4437	4698	4959	5220	5481	5742	6003	6264	6525
30	1620	1890	2160	2430	2700	2970	3240	3510	3780	4050	4320	4590	4860	5130	5400	5670	5940	6210	6480	6750
31	1674	1953	2232	2511	2790	3069	3348	3627	3906	4185	4464	4743	5022	5301	5580	5859	6138	6417	6696	6975
32	1728	2016	2304	2592	2880	3168	3456	3744	4032	4320	4608	4896	5184	5472	5760	6048	6336	6624	6912	7200
33	1782	2079	2376	2673	2970	3267	3564	3861	4158	4455	4752	5049	5346	5643	5940	6237	6534	6831	7128	7425
34	1836	2142	2448	2754	3060	3366	3672	3978	4284	4590	4896	5202	5508	5814	6120	6426	6732	7038	7344	7650
35	1890	2205	2520	2835	3150	3465	3780	4095	4410	4725	5040	5355	5670	5985	6300	6615	6930	7245	7560	7875
36	1944	2268	2592	2916	3240	3564	3888	4212	4536	4860	5184	5508	5832	6156	6480	6804	7128	7452	7776	8100
37	1998	2331	2664	2997	3330	3663	3996	4329	4662	4995	5328	5661	5994	6327	6660	6993	7326	7659	7992	8325
38	2052	2394	2736	3078	3420	3762	4104	4446	4788	5130	5472	5814	6156	6498	6840	7182	7524	7866	8208	8550
39	2106	2457	2808	3159	3510	3861	4212	4563	4914	5265	5616	5967	6318	6669	7020	7371	7722	8073	8424	8775
40	2160	2520	2880	3240	3600	3960	4320	4680	5040	5400	5760	6120	6480	6840	7200	7560	7920	8280	8640	9000
41	2214	2583	2952	3321	3690	4059	4428	4797	5166	5535	5904	6273	6642	7011	7380	7749	8118	8487	8856	9225
42	2268	2646	3024	3402	3780	4158	4536	4914	5292	5670	6048	6426	6804	7182	7560	7938	8316	8694	9072	9450
43	2322	2709	3096	3483	3870	4257	4644	5031	5418	5805	6192	6579	6966	7353	7740	8127	8514	8901	9288	9675
44	2376	2772	3168	3564	3960	4356	4752	5148	5544	5940	6336	6732	7128	7524	7920	8316	8712	9108	9504	9900
45	2430	2835	3240	3645	4050	4455	4860	5265	5670	6075	6480	6885	7290	7695	8100	8505	8910	9315	9720	10125
46	2484	2898	3312	3726	4140	4554	4968	5382	5796	6210	6624	7038	7452	7866	8280	8694	9108	9522	9936	10350
47	2538	2961	3384	3807	4230	4653	5076	5499	5922	6345	6768	7191	7614	8037	8460	8883	9306	9729	10152	10575
48	2592	3024	3456	3888	4320	4752	5184	5616	6048	6480	6912	7344	7776	8208	8640	9072	9504	9936	10368	10800
49	2646	3087	3528	3969	4410	4851	5292	5733	6174	6615	7056	7497	7938	8379	8820	9261	9702	10143	10584	11025
50	2700	3150	3600	4050	4500	4950	5400	5850	6300	6750	7200	7650	8100	8550	9000	9450	9900	10350	10800	11250

	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½	19	20	21	22	23	24	25
13	3042																		
13½	3159	3281																	
14	3276	3402	3528																
14½	3393	3524	3654	3785															
15	3510	3645	3780	3915	4050														
15½	3627	3767	3906	4046	4185	4325													
16	3744	3888	4032	4176	4320	4464	4608												
16½	3861	4010	4158	4307	4455	4604	4752	4901											
17	3978	4131	4284	4437	4590	4743	4896	5049	5202										
17½	4095	4253	4410	4568	4725	4883	5040	5198	5355	5513									
18	4212	4374	4536	4698	4860	5022	5184	5346	5508	5670	5832								
18½	4329	4496	4662	4829	4995	5162	5328	5495	5661	5828	5994	6161							
19	4446	4617	4788	4959	5130	5301	5472	5643	5814	5985	6156	6327	6498						
19½	4563	4739	4914	5090	5265	5441	5616	5792	5967	6143	6318	6494	6669	7020					
20	4680	4860	5040	5220	5400	5580	5760	5940	6120	6300	6480	6660	6840	7200	7560				
21	4914	5103	5292	5481	5670	5859	6048	6237	6426	6615	6804	6993	7182	7560	7938	8316			
22	5148	5346	5544	5742	5940	6138	6336	6534	6732	6930	7128	7326	7524	7920	8316	8712	9108		
23	5382	5589	5796	6003	6210	6417	6624	6831	7038	7245	7452	7659	7866	8280	8694	9108	9522	9936	
24	5616	5832	6048	6264	6480	6696	6912	7128	7344	7560	7776	7992	8208	8640	9072	9504	9936	10368	10800
25	5850	6075	6300	6525	6750	6975	7200	7425	7650	7875	8100	8325	8550	9000	9450	9900	10350	10800	11250
26	6084	6318	6552	6786	7020	7254	7488	7722	7956	8190	8424	8658	8892	9360	9828	10296	10764	11232	11700
27	6318	6561	6804	7047	7290	7533	7776	8019	8262	8505	8748	8991	9234	9720	10206	10692	11178	11664	12150
28	6552	6804	7056	7308	7560	7812	8064	8316	8568	8820	9072	9324	9576	10080	10584	11088	11592	12096	12600
29	6786	7047	7308	7569	7830	8091	8352	8613	8874	9135	9396	9657	9918	10440	10962	11484	12006	12528	13050
30	7020	7290	7560	7830	8100	8370	8640	8910	9180	9450	9720	9990	10260	10800	11340	11880	12420	12960	13500
31	7254	7533	7812	8091	8370	8649	8928	9207	9486	9765	10044	10323	10602	11160	11718	12276	12834	13392	13950
32	7488	7776	8064	8352	8640	8928	9216	9504	9792	10080	10368	10656	10944	11520	12096	12672	13248	13824	14400
33	7722	8019	8316	8613	8910	9207	9504	9801	10098	10395	10692	10989	11286	11880	12474	13068	13662	14256	14850
34	7956	8262	8568	8874	9180	9486	9792	10098	10404	10710	11016	11322	11628	12240	12852	13464	14076	14688	15300
35	8190	8505	8820	9135	9450	9765	10080	10395	10710	11025	11340	11655	11970	12600	13230	13860	14490	15120	15750
36	8424	8748	9072	9396	9720	10044	10368	10692	11016	11340	11664	11988	12312	12960	13608	14256	14904	15552	16200
37	8658	8991	9324	9657	9990	10323	10656	10989	11322	11655	11988	12321	12654	13320	13986	14652	15318	15984	16650
38	8892	9234	9576	9918	10260	10602	10944	11286	11628	11970	12312	12654	12996	13680	14364	15048	15732	16416	17100
39	9126	9477	9828	10179	10530	10881	11232	11583	11934	12285	12636	12987	13338	14040	14742	15444	16146	16848	17550
40	9360	9720	10080	10440	10800	11160	11520	11880	12240	12600	12960	13320	13680	14400	15120	15840	16560	17280	18000
41	9594	9963	10332	10701	11070	11439	11808	12177	12546	12915	13284	13653	14022	14760	15498	16236	16974	17712	18450
42	9828	10206	10584	10962	11340	11718	12096	12474	12852	13230	13608	13986	14364	15120	15876	16632	17388	18144	18900
43	10062	10449	10836	11223	11610	11997	12384	12771	13158	13545	13932	14319	14706	15480	16254	17028	17802	18576	19350
44	10296	10692	11088	11484	11880	12276	12672	13068	13464	13860	14256	14652	15048	15840	16632	17424	18216	19008	19800
45	10530	10935	11340	11745	12150	12555	12960	13365	13770	14175	14580	14985	15390	16200	17010	17820	18630	19440	20250
46	10764	11178	11592	12006	12420	12834	13248	13662	14076	14490	14904	15318	15732	16560	17388	18216	19044	19872	20700
47	10998	11421	11844	12267	12690	13113	13536	13959	14382	14805	15228	15651	16074	16920	17766	18612	19458	20304	21150
48	11232	11664	12096	12528	12960	13392	13824	14256	14688	15120	15552	15984	16416	17280	18144	19008	19872	20736	21600
49	11466	11907	12348	12789	13230	13671	14112	14553	14994	15435	15876	16317	16758	17640	18522	19404	20286	21168	22050
50	11700	12150	12600	13050	13500	13950	14400	14850	15300	15750	16200	16650	17100	18000	18900	19800	20700	21600	22500

18 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	8100	8550	9000	9450	9900	10350	10800	11250								
26	8424	8892	9360	9828	10296	10764	11232	11700	12168							
27	8748	9234	9720	10206	10692	11178	11664	12150	12636	13122						
28	9072	9576	10080	10584	11088	11592	12096	12600	13104	13608	14112					
29	9396	9918	10440	10962	11484	12006	12528	13050	13572	14094	14616	15138				
30	9720	10260	10800	11340	11880	12420	12960	13500	14040	14580	15120	15660	16200			
31	10044	10602	11160	11718	12276	12834	13392	13950	14508	15066	15624	16182	16740	17298		
32	10368	10944	11520	12096	12672	13248	13824	14400	14976	15552	16128	16704	17280	17856	18432	
33	10692	11286	11880	12474	13068	13662	14256	14850	15444	16038	16632	17226	17820	18414	19008	19602
34	11016	11628	12240	12852	13464	14076	14688	15300	15912	16524	17136	17748	18360	18972	19584	20196
35	11340	11970	12600	13230	13860	14490	15120	15750	16380	17010	17640	18270	18900	19530	20160	20790
36	11664	12312	12960	13608	14256	14904	15552	16200	16848	17496	18144	18792	19440	20088	20736	21384
37	11988	12654	13320	13986	14652	15318	15984	16650	17316	17982	18648	19314	19980	20646	21312	21978
38	12312	12996	13680	14364	15048	15732	16416	17100	17784	18468	19152	19836	20520	21204	21888	22572
39	12636	13338	14040	14742	15444	16146	16848	17550	18252	18954	19656	20358	21060	21762	22464	23166
40	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
41	13284	14022	14760	15498	16236	16974	17712	18450	19188	19926	20664	21402	22140	22878	23616	24354
42	13608	14362	15120	15876	16632	17388	18144	18900	19656	20412	21168	21924	22680	23436	24192	24948
43	13932	14706	15480	16254	17028	17802	18576	19350	20124	20898	21672	22446	23220	23994	24768	25542
44	14256	15048	15840	16632	17424	18216	19008	19800	20592	21384	22176	22968	23760	24552	25344	26136
45	14580	15390	16200	17010	17820	18630	19440	20250	21060	21870	22680	23490	24300	25110	25920	26730
46	14904	15732	16560	17388	18216	19044	19872	20700	21528	22356	23184	24012	24840	25668	26496	27324
47	15228	16074	16920	17766	18612	19458	20304	21150	21996	22842	23688	24534	25380	26226	27072	27918
48	15552	16416	17280	18144	19008	19872	20736	21600	22464	23328	24192	25056	25920	26784	27648	28512
49	15876	16758	17640	18522	19404	20286	21168	22050	22932	23814	24696	25578	26460	27342	28224	29106
50	16200	17100	18000	18900	19800	20700	21600	22500	23400	24300	25200	26100	27000	27900	28800	29700
52	16848	17784	18720	19656	20592	21528	22464	23400	24336	25272	26208	27144	28080	29016	29952	30888
54	17496	18468	19440	20412	21384	22356	23328	24300	25272	26244	27216	28188	29160	30132	31104	32076
56	18144	19152	20160	21168	22176	23184	24192	25200	26208	27216	28224	29232	30240	31248	32256	33264
58	18792	19836	20880	21924	22968	24012	25056	26100	27144	28188	29232	30276	31320	32364	33408	34452
60	19440	20520	21600	22680	23760	24840	25920	27000	28080	29160	30240	31320	32400	33480	34560	35640
62	20088	21204	22320	23436	24552	25668	26784	27900	29016	30132	31248	32364	33480	34596	35712	36828
64	20736	21888	23040	24192	25344	26496	27648	28800	29952	31104	32256	33408	34560	35712	36864	38016
66	21384	22572	23760	24948	26136	27324	28512	29700	30888	32076	33264	34452	35640	36828	38016	39204
68	22032	23256	24480	25704	26928	28152	29376	30600	31824	33048	34272	35496	36720	37944	39168	40392
70	22680	23940	25200	26460	27720	28980	30240	31500	32760	34020	35280	36540	37800	39060	40320	41580
72	23328	24624	25920	27216	28512	29808	31104	32400	33696	34992	36288	37584	38880	40176	41472	42768
74	23976	25308	26640	27972	29304	30636	31968	33300	34632	35964	37296	38628	39960	41292	42624	43956
76	24624	26000	27360	28728	30096	31464	32832	34200	35568	36936	38304	39672	41040	42408	43776	45144
78	25272	26676	28080	29484	30888	32292	33696	35100	36504	37908	39312	40716	42120	43524	44928	46332
80	25920	27360	28800	30240	31680	33120	34560	36000	37440	38880	40320	41760	43200	44640	46080	47520
85	27540	29070	30600	32130	33660	35190	36720	38250	39780	41310	42840	44370	45900	47430	48960	50490
90	29160	30780	32400	34020	35640	37260	38880	40500	42120	43740	45360	46980	48600	50220	51840	53460
95	30780	32490	34200	35910	37620	39330	41040	42750	44460	46170	47880	49590	51300	53010	54720	56430
100	32400	34200	36000	37800	39600	41400	43200	45000	46800	48600	50400	52200	54000	55800	57600	59400
105	34020	35910	37800	39690	41580	43470	45360	47250	49140	51030	52920	54810	56700	58590	60480	62370
110	35640	37620	39600	41580	43560	45540	47520	49500	51480	53460	55440	57420	59400	61380	63360	65340
115	37260	39330	41400	43470	45540	47610	49680	51750	53820	55890	57960	60030	62100	64170	66240	68310
120	38880	41040	43200	45360	47520	49680	51840	54000	56160	58320	60480	62640	64800	66960	69120	71280
125	40500	42750	45000	47250	49500	51750	54000	56250	58500	60750	63000	65250	67500	69750	72000	74250
130	42120	44460	46800	49140	51480	53820	56160	58500	60840	63180	65520	67860	70200	72540	74880	77220
135	43740	46170	48600	51030	53460	55890	58320	60750	63180	65610	68040	70470	72900	75330	77760	80190
140	45360	47880	50400	52920	55440	57960	60480	63000	65520	68040	70560	73080	75600	78120	80640	83160
145	46980	49590	52200	54810	57420	60030	62640	65250	67860	70470	73080	75690	78300	80910	83520	86130
150	48600	51300	54000	56700	59400	62100	64800	67500	70200	72900	75600	78300	81000	83700	86400	89100
155	50220	53010	55800	58590	61380	64170	66960	69750	72540	75330	78120	80910	83700	86490	89280	92070
160	51840	54720	57600	60480	63360	66240	69120	72000	74880	77760	80640	83520	86400	89280	92160	95040
165	53460	56430	59400	62370	65340	68310	71280	74250	77220	80190	83160	86130	89100	92070	95040	98010
170	55080	58160	61200	64260	67320	70380	73440	76500	79560	82620	85680	88740	91800	94860	97920	100980
175	56700	59850	63000	66150	69300	72450	75600	78750	81900	85050	88200	91350	94500	97650	100800	103950
180	58320	61560	64800	68040	71280	74520	77760	81000	84240	87480	90720	93960	97200	100440	103680	106920
185	59940	63270	66600	69930	73260	76590	79920	83250	86580	89910	93240	96570	99900	103230	106560	109890
190	61560	64980	68400	71820	75240	78660	82080	85500	88920	92340	95760	99180	102600	106020	109440	112860
195	63180	66690	70200	73710	77220	80730	84240	87750	91260	94770	98280	101790	105300	108810	112320	115830
200	64800	68400	72000	75600	79200	82800	86400	90000	93600	97200	100800	104400	108000	111600	115200	118800

	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	50
34	20808															
35	21420	22050	22680													
36	22032	22680	23328	23976												
37	22644	23310	23976	24642	25308											
38	23256	23940	24624	25308	25992											
39	23868	24570	25272	25974	26676	27378										
40	24480	25200	25920	26640	27360	28080	28800									
41	25092	25830	26568	27306	28044	28782	29520	30258								
42	25704	26460	27216	27972	28728	29484	30240	30996	31752							
43	26316	27090	27864	28638	29412	30186	30960	31734	32508	33282						
44	26928	27720	28512	29304	30096	30888	31680	32472	33264	34056	34848					
45	27540	28350	29160	29970	30780	31590	32400	33210	34020	34830	35640	36450				
46	28152	28980	29808	30636	31464	32292	33120	33948	34776	35604	36432	37260	38088			
47	28764	29610	30456	31302	32148	32994	33840	34686	35532	36378	37224	38070	38916	39762		
48	29376	30240	31104	31968	32832	33696	34560	35424	36288	37152	38016	38880	39744	40608	41472	
49	29988	30870	31752	32634	33516	34398	35280	36162	37044	37926	38808	39690	40572	41454	42336	44100
50	30600	31500	32400	33300	34200	35100	36000	36900	37800	38700	39600	40500	41400	42300	43200	45000
52	31824	32760	33696	34632	35568	36504	37440	38376	39312	40248	41184	42120	43056	43992	44928	46800
54	33048	34020	34992	35964	36936	37908	38880	39852	40824	41796	42768	43740	44712	45684	46656	48600
56	34272	35280	36288	37296	38304	39312	40320	41328	42336	43344	44352	45360	46368	47376	48384	50400
58	35496	36540	37584	38628	39672	40716	41760	42804	43848	44892	45936	46980	48024	49068	50112	52200
60	36720	37800	38880	39960	41040	42120	43200	44280	45360	46440	47520	48600	49680	50760	51840	54000
62	37944	39060	40176	41292	42408	43524	44640	45756	46872	47988	49104	50220	51336	52452	53568	55800
64	39168	40320	41472	42624	43776	44928	46080	47232	48384	49536	50688	51840	52992	54144	55296	57600
66	40392	41580	42768	43956	45144	46332	47520	48708	49896	51084	52272	53460	54648	55836	57024	59400
68	41616	42840	44064	45288	46512	47736	48960	50184	51408	52632	53856	55080	56304	57528	58752	61200
70	42840	44100	45360	46620	47880	49140	50400	51660	52920	54180	55440	56700	57960	59220	60480	63000
72	44064	45360	46656	47952	49248	50544	51840	53136	54432	55728	57024	58320	59616	60912	62208	64800
74	45288	46620	47952	49284	50616	51948	53280	54612	55944	57276	58608	59940	61272	62604	63936	66600
76	46512	47880	49248	50616	51984	53352	54720	56088	57456	58824	60192	61560	62928	64296	65664	68400
78	47736	49140	50544	51948	53352	54756	56160	57564	58968	60372	61776	63180	64584	65988	67392	70200
80	48960	50400	51840	53280	54720	56160	57600	59040	60480	61920	63360	64800	66240	67680	69120	72000
85	50200	53550	55080	56610	58140	59670	61200	62730	64260	65790	67320	68850	70380	71910	73440	76500
90	55080	56700	58320	59940	61560	63180	64800	66420	68040	69660	71280	72900	74520	76140	77760	81000
95	58140	59850	61560	63270	64980	66690	68400	70110	71820	73530	75240	76950	78660	80370	82080	85500
100	61200	63000	64800	66600	68400	70200	72000	73800	75600	77400	79200	81000	82800	84600	86400	90000
105	64260	66150	68040	69930	71820	73710	75600	77490	79380	81270	83160	85050	86940	88830	90720	94500
110	67320	69300	71280	73260	75240	77220	79200	81180	83160	85140	87120	89100	91080	93060	95040	99000
115	70380	72450	74520	76590	78660	80730	82800	84870	86940	89010	91080	93150	95220	97290	99360	103500
120	73440	75600	77760	79920	82080	84240	86400	88560	90720	92880	95040	97200	99360	101520	103680	108000
125	76500	78750	81000	83250	85500	87750	90000	92250	94500	96750	99000	101250	103500	105750	108000	112500
130	79560	81900	84240	86580	88920	91260	93600	95940	98280	100620	102960	105300	107640	109980	112320	117000
135	82620	85050	87480	89910	92340	94770	97200	99630	102060	104490	106920	109350	111780	114210	116640	121500
140	85680	88200	90720	93240	95760	98280	100800	103320	105840	108360	110880	113400	115920	118440	120960	126000
145	88740	91350	93960	96570	99180	101790	104400	107010	109620	112230	114840	117450	120060	122670	125280	130500
150	91800	94500	97200	99900	102600	105300	108000	110700	113400	116100	118800	121500	124200	126900	129600	135000
155	94860	97650	100440	103230	106020	108810	111600	114390	117180	119970	122760	125550	128340	131130	133920	139500
160	97920	100800	103680	106560	109440	112320	115200	118080	120960	123840	126720	129600	132480	135360	138240	144000
165	100980	103950	106920	109890	112860	115830	118800	121770	124740	127710	130680	133650	136620	139590	142560	148500
170	104040	107100	110160	113220	116280	119340	122400	125460	128520	131580	134640	137700	140760	143820	146880	153000
175	107100	110250	113400	116550	119700	122850	126000	129150	132300	135450	138600	141750	144900	148050	151200	157500
180	110160	113400	116640	119880	123120	126360	129600	132840	136080	139320	142560	145800	149040	152280	155520	162000
185	113220	116550	119880	123210	126540	129870	133200	136530	139860	143190	146520	149850	153180	156510	159840	166500
190	116280	119700	123120	126540	129960	133380	136800	140220	143640	147060	150480	153900	157320	160740	164160	171000
195	119340	122850	126360	129870	133380	136890	140400	143910	147420	150930	154440	157950	161460	164970	168480	175500
200	122400	126000	129600	133200	136800	140400	144000	147600	151200	154800	158400	162000	165600	169200	172800	180000

20 CUBICAL CONTENTS OF ROOMS 18X25 AND

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
25	9000	9500	10000	10500	11000	11500	12000	12500								
26	9360	9860	10400	10920	11440	11960	12480	13000	13520							
27	9720	10260	10800	11340	11880	12420	12960	13500	14040	14580						
28	10080	10640	11200	11760	12320	12880	13440	14000	14560	15120	15680					
29	10440	11020	11600	12180	12760	13340	13920	14500	15080	15660	16240	16820				
30	10800	11400	12000	12600	13200	13800	14400	15000	15600	16200	16800	17400	18000			
31	11160	11780	12400	13020	13640	14260	14880	15500	16120	16740	17360	17980	18600	19220		
32	11520	12160	12800	13440	14080	14720	15360	16000	16640	17280	17920	18560	19200	19840	20480	
33	11880	12540	13200	13860	14520	15180	15840	16500	17160	17820	18480	19140	19800	20460	21120	21780
34	12240	12920	13600	14280	14960	15640	16320	17000	17680	18360	19040	19720	20400	21080	21760	22440
35	12600	13300	14000	14700	15400	16100	16800	17500	18200	18900	19600	20300	21000	21700	22400	23100
36	12960	13680	14400	15120	15840	16560	17280	18000	18720	19440	20160	20880	21600	22320	23040	23760
37	13320	14060	14800	15540	16280	17020	17760	18500	19240	19980	20720	21460	22200	22940	23680	24420
38	13680	14440	15200	15960	16720	17480	18240	19000	19760	20520	21280	22040	22800	23560	24320	25080
39	14040	14820	15600	16380	17160	17940	18720	19500	20280	21060	21840	22620	23400	24180	24960	25740
40	14400	15200	16000	16800	17600	18400	19200	20000	20800	21600	22400	23200	24000	24800	25600	26400
41	14760	15580	16400	17220	18040	18860	19680	20500	21320	22140	22960	23780	24600	25420	26240	27060
42	15120	15960	16800	17640	18480	19320	20160	21000	21840	22680	23520	24360	25200	26040	26880	27720
43	15480	16340	17200	18060	18920	19780	20640	21500	22360	23220	24080	24940	25800	26660	27520	28380
44	15840	16720	17600	18480	19360	20240	21120	22000	22880	23760	24640	25520	26400	27280	28160	29040
45	16200	17100	18000	18900	19800	20700	21600	22500	23400	24300	25200	26100	27000	27900	28800	29700
46	16560	17480	18400	19320	20240	21160	22080	23000	23920	24840	25760	26680	27600	28520	29440	30360
47	16920	17860	18800	19740	20680	21620	22560	23500	24440	25380	26320	27260	28200	29140	30080	31020
48	17280	18240	19200	20160	21120	22080	23040	24000	24960	25920	26880	27840	28800	29760	30720	31680
49	17640	18620	19600	20580	21560	22540	23520	24500	25480	26460	27440	28420	29400	30380	31360	32340
50	18000	19000	20000	21000	22000	23000	24000	25000	26000	27000	28000	29000	30000	31000	32000	33000
51	18370	19380	20400	21420	22440	23460	24480	25500	26520	27540	28560	29580	30600	31620	32640	33660
52	18740	19760	20800	21840	22880	23920	24960	26000	27040	28080	29120	30160	31200	32240	33280	34320
53	19110	20140	21180	22220	23260	24300	25340	26380	27420	28460	29500	30540	31580	32620	33660	34700
54	19480	20520	21560	22600	23640	24680	25720	26760	27800	28840	29880	30920	31960	33000	34040	35080
55	19850	20890	21930	22970	24010	25050	26090	27130	28170	29210	30250	31290	32330	33370	34410	35450
56	20220	21260	22300	23340	24380	25420	26460	27500	28540	29580	30620	31660	32700	33740	34780	35820
57	20590	21630	22670	23710	24750	25790	26830	27870	28910	29950	30990	32030	33070	34110	35150	36190
58	20960	22000	23040	24080	25120	26160	27200	28240	29280	30320	31360	32400	33440	34480	35520	36560
59	21330	22370	23410	24450	25490	26530	27570	28610	29650	30690	31730	32770	33810	34850	35890	36930
60	21700	22740	23780	24820	25860	26900	27940	28980	30020	31060	32100	33140	34180	35220	36260	37300
61	22070	23110	24150	25190	26230	27270	28310	29350	30390	31430	32470	33510	34550	35590	36630	37670
62	22440	23480	24520	25560	26600	27640	28680	29720	30760	31800	32840	33880	34920	35960	37000	38040
63	22810	23850	24890	25930	26970	28010	29050	30090	31130	32170	33210	34250	35290	36330	37370	38410
64	23180	24220	25260	26300	27340	28380	29420	30460	31500	32540	33580	34620	35660	36700	37740	38780
65	23550	24590	25630	26670	27710	28750	29790	30830	31870	32910	33950	34990	36030	37070	38110	39150
66	23920	24960	26000	27040	28080	29120	30160	31200	32240	33280	34320	35360	36400	37440	38480	39520
67	24290	25330	26370	27410	28450	29490	30530	31570	32610	33650	34690	35730	36770	37810	38850	39890
68	24660	25700	26740	27780	28820	29860	30900	31940	32980	34020	35060	36100	37140	38180	39220	40260
69	25030	26070	27110	28150	29190	30230	31270	32310	33350	34390	35430	36470	37510	38550	39590	40630
70	25400	26440	27480	28520	29560	30600	31640	32680	33720	34760	35800	36840	37880	38920	39960	41000
71	25770	26810	27850	28890	29930	30970	32010	33050	34090	35130	36170	37210	38250	39290	40330	41370
72	26140	27180	28220	29260	30300	31340	32380	33420	34460	35500	36540	37580	38620	39660	40700	41740
73	26510	27550	28590	29630	30670	31710	32750	33790	34830	35870	36910	37950	38990	40030	41070	42110
74	26880	27920	28960	30000	31040	32080	33120	34160	35200	36240	37280	38320	39360	40400	41440	42480
75	27250	28290	29330	30370	31410	32450	33490	34530	35570	36610	37650	38690	39730	40770	41810	42850
76	27620	28660	29700	30740	31780	32820	33860	34900	35940	36980	38020	39060	40100	41140	42180	43220
77	27990	29030	30070	31110	32150	33190	34230	35270	36310	37350	38390	39430	40470	41510	42550	43590
78	28360	29400	30440	31480	32520	33560	34600	35640	36680	37720	38760	39800	40840	41880	42920	43960
79	28730	29770	30810	31850	32890	33930	34970	36010	37050	38090	39130	40170	41210	42250	43290	44330
80	29100	30140	31180	32220	33260	34300	35340	36380	37420	38460	39500	40540	41580	42620	43660	44700
81	29470	30510	31550	32590	33630	34670	35710	36750	37790	38830	39870	40910	41950	42990	44030	45070
82	29840	30880	31920	32960	34000	35040	36080	37120	38160	39200	40240	41280	42320	43360	44400	45440
83	30210	31250	32290	33330	34370	35410	36450	37490	38530	39570	40610	41650	42690	43730	44770	45810
84	30580	31620	32660	33700	34740	35780	36820	37860	38900	39940	40980	42020	43060	44100	45140	46180
85	30950	31990	33030	34070	35110	36150	37190	38230	39270	40310	41350	42390	43430	44470	45510	46550
86	31320	32360	33400	34440	35480	36520	37560	38600	39640	40680	41720	42760	43800	44840	45880	46920
87	31690	32730	33770	34810	35850	36890	37930	38970	40010	41050	42090	43130	44170	45210	46250	47290
88	32060	33100	34140	35180	36220	37260	38300	39340	40380	41420	42460	43500	44540	45580	46620	47660
89	32430	33470	34510	35550	36590	37630	38670	39710	40750	41790	42830	43870	44910	45950	46990	48030
90	32800	33840	34880	35920	36960	38000	39040	40080	41120	42160	43200	44240	45280	46320	47360	48400
91	33170	34210	35250	36290	37330	38370	39410	40450	41490	42530	43570	44610	45650	46690	47730	48770
92	33540	34580	35620	36660	37700	38740	39780	40820	41860	42900	43940	44980	46020	47060	48100	49140
93	33910	34950	35990	37030	38070	39110	40150	41190	42230	43270	44310	45350	46390	47430	48470	49510
94	34280	35320	36360	37400	38440	39480	40520	41560	42600	43640	44680	45720	46760	47800	48840	49880
95	34650	35690	36730	37770	38810	39850	40890	41930	42970	44010	45050	46090	47130	48170	49210	50250
96	35020	36060	37100	38140	39180	40220	41260	42300	43340	44380	45420</					

	34	35	36	37	38	39	40	41	42	43	44	45	46	48	50
34	23120														
35	23800	24500													
36	24480	25200	25920												
37	25160	25900	26640	27380											
38	25840	26600	27360	28120	28880										
39	26520	27300	28080	28860	29640	30420									
40	27200	28000	28800	29600	30400	31200	32000								
41	27880	28700	29520	30340	31160	31980	32800	33620							
42	28560	29400	30240	31080	31920	32760	33600	34440	35280						
43	29240	30100	30960	31820	32680	33540	34400	35260	36120	36980					
44	29920	30800	31680	32560	33440	34320	35200	36080	36960	37840	38720				
45	30600	31500	32400	33300	34200	35100	36000	36900	37800	38700	39600	40500			
46	31280	32200	33120	34040	34960	35880	36800	37720	38640	39560	40480	41400	42320		
47	31960	32900	33840	34780	35720	36660	37600	38540	39480	40420	41360	42300	43240		
48	32640	33600	34560	35520	36480	37440	38400	39360	40320	41280	42240	43200	44160	46080	
49	33320	34300	35280	36260	37240	38220	39200	40180	41160	42140	43120	44100	45080	47040	
50	34000	35000	36000	37000	38000	39000	40000	41000	42000	43000	44000	45000	46000	48000	50000
52	35360	36400	37440	38480	39520	40560	41600	42640	43680	44720	45760	46800	47840	49920	52000
54	36720	37800	38880	39960	41040	42120	43200	44280	45360	46440	47520	48600	49680	51840	54000
56	38080	39200	40320	41440	42560	43680	44800	45920	47040	48160	49280	50400	51520	53760	56000
58	39440	40600	41760	42920	44080	45240	46400	47560	48720	49880	51040	52200	53360	55680	58000
60	40800	42000	43200	44400	45600	46800	48000	49200	50400	51600	52800	54000	55200	57600	60000
62	42160	43400	44640	45880	47120	48360	49600	50840	52080	53320	54560	55800	57040	59520	62000
64	43520	44800	46080	47360	48640	49920	51200	52480	53760	55040	56320	57600	58880	61440	64000
66	44880	46200	47520	48840	50160	51480	52800	54120	55440	56760	58080	59400	60720	63360	66000
68	46240	47600	48960	50320	51680	53040	54400	55760	57120	58480	59840	61200	62560	65280	68000
70	47600	49000	50400	51800	53200	54600	56000	57400	58800	60200	61600	63000	64400	67200	70000
72	48960	50400	51840	53280	54720	56160	57600	59040	60480	61920	63360	64800	66240	69120	72000
74	50320	51800	53280	54760	56240	57720	59200	60680	62160	63640	65120	66600	68080	71040	74000
76	51680	53200	54720	56240	57760	59280	60800	62320	63840	65360	66880	68400	69920	72960	76000
78	53040	54600	56160	57720	59280	60840	62400	63960	65520	67080	68640	70200	71760	74880	78000
80	54400	56000	57600	59200	60800	62400	64000	65600	67200	68800	70400	72000	73600	76800	80000
85	57800	59500	61200	62900	64600	66300	68000	69700	71400	73100	74800	76500	78200	81600	85000
90	61200	63000	64800	66600	68400	70200	72000	73800	75600	77400	79200	81000	82800	86400	90000
95	64600	66500	68400	70300	72200	74100	76000	77900	79800	81700	83600	85500	87400	91200	95000
100	68000	70000	72000	74000	76000	78000	80000	82000	84000	86000	88000	90000	92000	96000	100000
105	71400	73500	75600	77700	79800	81900	84000	86100	88200	90300	92400	94500	96600	100800	105000
110	74800	77000	79200	81400	83600	85800	88000	90200	92400	94600	96800	99000	101200	105600	110000
115	78200	80500	82800	85100	87400	89700	92000	94300	96600	98900	101200	103500	105800	110400	115000
120	81600	84000	86400	88800	91200	93600	96000	98400	100800	103200	105600	108000	110400	115200	120000
125	85000	87500	90000	92500	95000	97500	100000	102500	105000	107500	110000	112500	115000	120000	125000
130	88400	91000	93600	96200	98800	101400	104000	106600	109200	111800	114400	117000	119600	124800	130000
135	91800	94500	97200	99900	102600	105300	108000	110700	113400	116100	118800	121500	124200	129600	135000
140	95200	98000	100800	103600	106400	109200	112000	114800	117600	120400	123200	126000	128800	134400	140000
145	98600	101500	104400	107300	110200	113100	116000	118900	121800	124700	127600	130500	133400	139200	145000
150	102000	105000	108000	111000	114000	117000	120000	123000	126000	129000	132000	135000	138000	144000	150000
155	105400	108500	111600	114700	117800	120900	124000	127100	130200	133300	136400	139500	142600	148800	155000
160	108800	112000	115200	118400	121600	124800	128000	131200	134400	137600	140800	144000	147200	153600	160000
165	112200	115500	118800	122100	125400	128700	132000	135300	138600	141900	145200	148500	151800	158400	165000
170	115600	119000	122400	125800	129200	132600	136000	139400	142800	146200	149600	153000	156400	163200	170000
175	119000	122500	126000	129500	133000	136500	140000	143500	147000	150500	154000	157500	161000	168000	175000
180	122400	126000	129600	133200	136800	140400	144000	147600	151200	154800	158400	162000	165600	172800	180000
185	125800	129500	133200	136900	140600	144300	148000	151700	155400	159100	162800	166500	170200	177600	185000
190	129200	133000	136800	140600	144400	148200	152000	155800	159600	163400	167200	171000	174800	182400	190000
195	132600	136500	140400	144300	148200	152100	156000	159900	163800	167700	171600	175500	179400	187200	195000
200	136000	140000	144000	148000	152000	156000	160000	164000	168000	172000	176000	180000	184000	192000	200000

Amt.	RATE.																	
	2½	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½
5	2	1½	1½	1½	1	1												
6	2½	2	1½	1½	1½	1	1											
7	2½	2½	2½	2	1½	1½	1											
8	3	2½	2½	2½	2	1½	1½	1	1									
9	3½	3	2½	2½	2	1½	1½	1	1	1								
10	4	3½	2½	2½	2½	2	1½	1½	1½	1								
11	4½	3½	3½	3	2½	2½	2	1½	1½	1½								
12	4½	4	3½	3	2½	2½	2	1½	1½	1½								
13	5½	4½	3½	3½	3	2½	2½	1½	1½	1½								
14	5½	4½	4	3½	3	2½	2½	2	1½	1½								
15	6	5	4½	3½	3½	3	2½	2½	2	1½	1	¾						
16	6½	5½	4½	4	3½	3½	2½	2½	2	1½	1	1	1					
17	6½	5½	4½	4½	3½	3½	2½	2½	2½	1½	1½	1	1					
18	7	6	5½	4½	4	3½	3	2½	2½	1½	1½	1	1					
19	7½	6½	5½	4½	4½	3½	3½	2½	2½	2	1½	1	1					
20	8	6½	5½	5	4½	4	3½	2½	2½	2	1½	1½	1	1				
21	8½	7	6	5½	4½	4½	3½	3	2½	2	1½	1½	1	1				
22	8½	7½	6½	5½	5	4½	3½	3½	2½	2½	1½	1½	1	1				
23	9	7½	6½	5½	5	4½	3½	3½	3	2½	1½	1½	1	1				
24	9½	8	6½	5½	5½	4½	4	3½	3	2½	1½	1½	1	1				
25	10	8½	7½	6½	5½	5	4½	3½	3½	2½	1½	1½	1	1				
26	10½	8½	7½	6½	5½	5½	4½	3½	3½	2½	1½	1½	1	1				
27	10½	9	7½	6½	6	5½	4½	3½	3½	2½	1½	1½	1	1				
28	11	9½	8	7	6½	5½	4½	4	3½	2½	1½	1½	1	1				
29	11½	9½	8½	7½	6½	5½	4½	4½	3½	3	2	1½	1	1				
30	12	10	8½	7½	6½	6	5	4½	3½	3	2	1½	1½	1				
31	12½	10½	9	8	7	6½	5½	4½	4	3	2	1½	1½	1				
32	12½	10½	9½	8½	7	6½	5½	4½	4	3½	2½	1½	1½	1				
33	13½	11	9½	8½	7½	6½	5½	4½	4½	3½	2½	1½	1½	1				
34	13½	11½	9½	8½	7½	6½	5½	4½	4½	3½	2½	1½	1½	1				
35	14	11½	10	8½	7½	7	5½	5	4½	3½	2½	2	1½	1				
36	14½	12	10½	9	8	7½	6	5½	4½	3½	2½	2	1½	1				
37	14½	12½	10½	9½	8½	7½	6½	5½	4½	3½	2½	2	1½	1				
38	15½	12½	10½	9½	8½	7½	6½	5½	4½	3½	2½	2	1½	1				
39	15½	13	11½	9½	8½	7½	6½	5½	5	4	2½	2½	2	1½				
40	16	13½	11½	10	9	8	6½	5½	5	4	2½	2½	2	1½				
41	16½	13½	11½	10½	9	8½	6½	5½	5½	4	2½	2½	2	1½				
42	16½	14	12	10½	9½	8½	7	6	5½	4½	2½	2½	2	1½				
43	17½	14½	12½	10½	9½	8½	7½	6½	5½	4½	2½	2½	2	1½				
44	17½	14½	12½	11	9½	8½	7½	6½	5½	4½	2½	2½	2	1½				
45	18	15	12½	11½	10	9	7½	6½	5½	4½	3	2½	2½	2				
46	18½	15½	13½	11½	10½	9½	7½	6½	5½	4½	3	2½	2½	2				
47	18½	15½	13½	11½	10½	9½	7½	6½	6	4½	3½	2½	2½	2				
48	19½	16	13½	12	10½	9½	8	6½	6	4½	3½	2½	2½	2				
49	19½	16½	14	12½	11	9½	8½	7	6½	5	3½	2½	2½	2				
50	20	16½	14½	12½	11	10	8½	7½	6½	5	3½	2½	2½	2				
51	20½	17	14½	12½	11½	10½	8½	7½	6½	5½	3½	3	2½	2½				
52	20½	17½	14½	13	11½	10½	8½	7½	6½	5½	3½	3	2½	2½				
53	21½	17½	15½	13½	11½	10½	8½	7½	6½	5½	3½	3	2½	2½				
54	21½	18	15½	13½	12	10½	9	7½	6½	5½	3½	3	2½	2½				
55	22	18½	15½	13½	12½	11	9½	7½	7	5½	3½	3½	2½	2½				
56	22½	18½	16	14	12½	11½	9½	8	7	5½	3½	3½	2½	2½				
57	22½	19	16½	14½	12½	11½	9½	8½	7½	5½	3½	3½	2½	2½				
58	23½	19½	16½	14½	13	11½	9½	8½	7½	5½	3½	3	2½	2½				
59	23½	19½	16½	14½	13	11½	9½	8½	7½	6	4	3½	3	2½				
60	24	20	17½	15	13½	12	10	8½	7½	6	4	3½	3	2½				
61	24	20½	17½	15½	13½	12½	10½	8½	7½	6	4	3½	3	2½				
62	24½	20½	17½	15½	13½	12½	10½	8½	7½	6½	4½	3½	3	2½				
63	25½	21	18	15½	14	12½	10½	9	8	6½	4½	3½	3½	2½				
64	25½	21½	18½	16	14½	12½	10½	9½	8	6½	4½	3½	3½	2½				
65	26	21½	18½	16½	14½	13	10½	9½	8½	6½	4½	3½	3½	3				
66	26½	22	19	16½	14½	13½	11	9½	8½	6½	4½	3½	3½	3				
67	26½	22½	19½	16½	15	13½	11½	9½	8½	6½	4½	3½	3½	3				
68	27½	22½	19½	17	15	13½	11½	9½	8½	6½	4½	4	3½	3				
69	27½	23	19½	17½	15½	13½	11½	9½	8½	7	4½	4	3½	3				

Square Foot of Glass Surface, Wall Surface, or Cubic Feet.

5 to 69

SEE EXPLANATION, PAGE 61½.

Amt.	RATE.																		
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200	
35	1																		
36	1																		
37	1	1																	
38	1	1																	
39	1½	1																	
40	1½	1	1																
41	1½	1	1																
42	1½	1	1	1															
43	1½	1½	1	1															
44	1½	1½	1	1															
45	1½	1½	1½	1	1														
46	1½	1½	1½	1	1														
47	1½	1½	1½	1	1	1													
48	1½	1½	1½	1½	1	1	1												
49	1½	1½	1½	1½	1	1	1												
50	1½	1½	1½	1½	1	1	1	1											
51	1½	1½	1½	1½	1½	1	1	1											
52	1½	1½	1½	1½	1½	1½	1	1	1										
53	1½	1½	1½	1½	1½	1½	1	1	1										
54	1½	1½	1½	1½	1½	1½	1½	1	1										
55	1½	1½	1½	1½	1½	1½	1	1	1	1									
56	1½	1½	1½	1½	1½	1½	1	1	1	1	1								
57	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1							
58	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1						
59	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1					
60	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1				
61	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1			
62	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1		
63	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
64	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
65	1½	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
66	2	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
67	2	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
68	2	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	
69	2	1½	1½	1½	1½	1½	1½	1½	1	1	1	1	1	1	1	1	1	1	

Amt.	RATE.																		
	2½	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½	
70	28	23	20	18	16	14	12	10	9	7	5	4	4	3	3	3	2	2	
71	28	24	20	18	16	14	12	10	9	7	5	4	4	3	3	3	2	2	
72	29	24	21	18	16	14	12	10	9	7	5	4	4	3	3	3	2	2	
73	29	24	21	18	16	15	12	10	9	7	5	4	4	3	3	3	2	2	
74	30	25	21	19	16	15	12	11	9	7	5	4	4	3	3	3	2	2	
75	30	25	21	19	17	15	13	11	9	8	5	4	4	3	3	3	3	2	
76	30	25	22	19	17	15	13	11	10	8	5	4	4	3	3	3	3	2	
77	31	26	22	19	17	15	13	11	10	8	5	4	4	3	3	3	3	2	
78	31	26	22	20	17	16	13	11	10	8	5	4	4	3	3	3	3	2	
79	32	26	23	20	18	16	13	11	10	8	5	5	4	4	3	3	3	2	
80	32	27	23	20	18	16	13	11	10	8	5	5	4	4	3	3	3	2	
81	32	27	23	20	18	16	14	12	10	8	5	5	4	4	3	3	3	2	
82	33	27	23	21	18	16	14	12	10	8	5	5	4	4	3	3	3	3	
83	33	28	24	21	18	17	14	12	10	8	6	5	4	4	3	3	3	3	
84	34	28	24	21	19	17	14	12	11	8	6	5	4	4	3	3	3	3	
85	34	28	24	21	19	17	14	12	11	9	6	5	4	4	3	3	3	3	
86	34	29	25	22	19	17	14	12	11	9	6	5	4	4	3	3	3	3	
87	35	29	25	22	19	17	15	12	11	9	6	5	4	4	3	3	3	3	
88	35	29	25	22	20	18	15	13	11	9	6	5	4	4	4	3	3	3	
89	36	30	25	22	20	18	15	13	11	9	6	5	4	4	4	3	3	3	
90	36	30	26	23	20	18	15	13	11	9	6	5	5	4	4	3	3	3	
91	36	30	26	23	20	18	15	13	11	9	6	5	5	4	4	3	3	3	
92	37	31	26	23	20	18	15	13	12	9	6	5	5	4	4	3	3	3	
93	37	31	27	23	21	19	16	13	12	9	6	5	5	4	4	3	3	3	
94	38	31	27	24	21	19	16	13	12	9	6	5	5	4	4	3	3	3	
95	38	32	27	24	21	19	16	14	12	10	6	5	5	4	4	3	3	3	
96	38	32	27	24	21	19	16	14	12	10	6	5	5	4	4	3	3	3	
97	39	32	28	24	22	19	16	14	12	10	6	6	5	4	4	4	3	3	
98	39	33	28	25	22	20	16	14	12	10	7	6	5	4	4	4	3	3	
99	40	33	28	25	22	20	17	14	12	10	7	6	5	4	4	4	3	3	
100	40	33	29	25	22	20	17	14	13	10	7	6	5	4	4	4	3	3	
110	44	37	31	28	24	22	19	15	14	11	7	6	6	5	4	4	4	3	
120	48	40	34	30	27	24	20	17	16	12	8	7	6	5	5	4	4	4	
130	52	43	37	33	29	26	22	19	17	13	9	7	7	6	5	5	4	4	
140	56	47	40	35	31	28	24	20	18	14	9	8	7	6	6	5	5	4	
150	60	50	43	38	33	30	25	21	19	15	10	9	8	7	6	5	5	5	
160	64	53	46	40	36	32	27	23	21	16	11	9	8	7	6	6	5	5	
170	68	57	49	43	38	34	29	24	22	17	11	10	9	8	7	6	6	5	
180	72	60	51	45	40	36	30	26	23	18	12	10	9	8	7	7	6	6	
190	76	63	54	48	42	38	32	27	24	19	13	11	10	8	8	7	6	6	
200	80	67	57	50	44	40	34	29	25	20	13	11	10	9	8	7	7	6	
210	84	70	60	53	47	42	35	30	26	21	14	12	11	9	8	8	7	6	
220	88	73	63	55	49	44	37	31	28	22	15	13	11	10	9	8	7	7	
230	92	77	66	58	51	46	39	33	29	23	15	13	12	10	9	8	8	7	
240	96	80	69	60	53	48	40	34	30	24	16	14	12	11	10	9	8	7	
250	100	83	71	63	56	50	42	36	31	25	17	14	13	11	10	9	8	8	
260	104	87	74	65	58	52	44	37	33	26	17	15	13	12	10	10	9	8	
270	108	90	77	68	60	54	45	39	34	27	18	15	14	12	11	10	9	8	
280	112	93	80	70	62	56	47	40	35	28	19	16	14	12	11	10	9	9	
290	116	97	83	73	64	58	48	41	36	29	19	17	15	13	12	11	10	9	
300	120	100	86	75	67	60	50	43	38	30	20	17	15	13	12	11	10	9	
310	124	103	89	78	69	62	52	44	39	31	21	18	16	14	12	11	10	10	
320	128	107	91	80	71	64	53	46	40	32	21	18	16	14	13	12	11	10	
330	132	110	94	83	73	66	55	47	41	33	22	19	17	15	13	12	11	10	
340	136	113	97	85	76	68	57	49	43	34	23	19	17	15	14	12	11	10	
350	140	117	100	88	78	70	58	50	44	35	23	20	18	16	14	13	12	11	
360	144	120	103	90	80	72	60	51	45	36	24	21	18	16	14	13	12	11	
370	148	123	106	93	82	74	62	53	46	37	25	21	19	16	15	13	12	11	
380	152	127	109	95	84	76	63	54	47	38	25	22	19	17	15	14	13	12	
390	156	130	111	98	87	78	65	56	49	39	26	22	20	17	16	14	13	12	
400	160	133	114	100	89	80	67	57	50	40	27	23	20	18	16	15	13	12	
410	164	137	117	103	91	82	68	59	51	41	27	23	21	18	16	15	14	13	
420	168	140	120	105	93	84	70	60	52	42	28	24	21	19	17	15	14	13	
430	172	143	123	108	96	86	72	61	53	43	29	25	22	19	17	16	14	13	
440	176	147	126	110	98	88	73	63	55	44	29	25	22	20	18	16	15	14	

Square Foot of Glass Surface, Wall Surface, or Cubic Feet.

70 to 440.

SEE EXPLANATION, PAGE 611.

Amt.	RATE.																		
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200	
70	2	2	2	2	2	1	1	1	1	1									
71	2	2	2	2	2	1	1	1	1	1									
72	2	2	2	2	2	2	1	1	1	1									
73	2	2	2	2	2	2	1	1	1	1									
74	2	2	2	2	2	2	1	1	1	1									
75	2	2	2	2	2	2	2	1	1	1									
76	2	2	2	2	2	2	2	2	1	1									
77	2	2	2	2	2	2	2	2	1	1									
78	2	2	2	2	2	2	2	2	1	1									
79	2	2	2	2	2	2	2	1	1	1									
80	2	2	2	2	2	2	2	1	1	1	1								
81	2	2	2	2	2	2	2	1	1	1	1								
82	2	2	2	2	2	2	2	2	1	1	1								
83	2	2	2	2	2	2	2	2	1	1	1								
84	2	2	2	2	2	2	2	2	2	1	1								
85	2	2	2	2	2	2	2	2	1	1	1								
86	2	2	2	2	2	2	2	2	1	1	1								
87	2	2	2	2	2	2	2	2	1	1	1								
88	3	2	2	2	2	2	2	2	1	1	1								
89	3	2	2	2	2	2	2	2	1	1	1								
90	3	2	2	2	2	2	2	2	2	1	1	1							
91	3	2	2	2	2	2	2	2	2	1	1	1							
92	3	2	2	2	2	2	2	2	2	1	1	1							
93	3	2	2	2	2	2	2	2	2	1	1	1							
94	3	3	2	2	2	2	2	2	2	1	1	1							
95	3	3	2	2	2	2	2	2	2	1	1	1							
96	3	3	2	2	2	2	2	2	2	1	1	1							
97	3	3	2	2	2	2	2	2	2	1	1	1							
98	3	3	2	2	2	2	2	2	2	1	1	1							
99	3	3	2	2	2	2	2	2	2	1	1	1							
100	3	3	3	2	2	2	2	2	2	1	1	1	1						
110	3	3	3	3	2	2	2	2	2	2	1	1	1	1					
120	3	3	3	3	3	3	2	2	2	2	2	1	1	1	1				
130	4	3	3	3	3	3	3	2	2	2	2	2	1	1	1	1			
140	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1		
150	4	4	4	4	3	3	3	3	3	2	2	2	2	1	1	1	1	1	
160	5	4	4	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1	
170	5	5	4	4	4	4	3	3	3	2	2	2	2	1	1	1	1	1	
180	5	5	5	4	4	4	4	3	3	3	2	2	2	2	1	1	1	1	
190	5	5	5	4	4	4	4	3	3	3	2	2	2	2	1	1	1	1	
200	6	5	5	5	4	4	4	4	3	3	3	2	2	2	2	1	1	1	
210	6	6	5	5	5	4	4	4	4	3	3	3	2	2	2	1	1	1	
220	6	6	6	5	5	5	4	4	4	3	3	3	2	2	2	2	1	1	
230	7	6	6	5	5	5	5	4	4	3	3	3	3	2	2	2	1	1	
240	7	6	6	5	5	5	5	4	4	3	3	3	3	2	2	2	1	1	
250	7	7	6	6	6	5	5	5	4	4	3	3	3	2	2	2	1	1	
260	7	7	7	6	6	5	5	5	4	4	3	3	3	2	2	2	1	1	
270	8	7	7	6	6	6	5	5	5	4	3	3	3	2	2	2	1	1	
280	8	7	7	7	6	6	6	5	5	4	4	3	3	2	2	2	1	1	
290	8	8	7	7	6	6	6	5	5	4	4	3	3	3	2	2	1	1	
300	9	8	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	
310	9	8	8	7	7	7	6	6	5	4	4	3	3	3	2	2	2	2	
320	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	
330	9	9	8	8	7	7	7	6	6	5	4	4	3	3	2	2	2	2	
340	10	9	9	8	8	7	7	6	6	5	4	4	3	3	2	2	2	2	
350	10	9	9	8	8	7	7	6	6	5	4	4	4	3	2	2	2	2	
360	10	10	9	8	8	8	7	6	6	5	5	4	4	3	2	2	2	2	
370	11	10	9	9	8	8	7	7	6	5	5	4	4	3	2	2	2	2	
380	11	10	10	9	8	8	8	7	6	5	5	4	4	3	2	2	2	2	
390	11	10	10	9	9	8	8	7	6	5	5	4	4	3	2	2	2	2	
400	11	11	10	9	9	8	8	7	7	6	5	4	4	3	2	2	2	2	
410	12	11	10	10	9	9	8	7	7	6	5	5	4	3	2	2	2	2	
420	12	11	11	10	9	9	8	8	7	6	5	5	4	4	3	2	2	2	
430	12	11	11	10	10	9	9	8	7	6	5	5	4	4	3	2	2	2	
440	13	12	11	10	10	9	9	8	7	6	5	5	4	4	3	2	2	2	

Amt.	RATE.																	
	2½	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½
450	180	150	129	113	100	90	75	64	56	45	30	26	23	20	18	16	15	14
460	184	153	131	115	102	92	77	66	58	46	31	26	23	20	18	17	15	14
470	188	157	134	118	104	94	78	67	59	47	31	27	24	21	19	17	16	14
480	192	160	137	120	107	96	80	69	60	48	32	27	24	21	19	17	16	15
490	196	163	140	123	109	98	82	70	61	49	33	28	25	22	20	18	16	15
500	200	167	143	125	111	100	83	71	63	50	33	29	25	22	20	18	17	15
510	204	170	146	128	113	102	85	73	64	51	34	29	26	23	20	18	17	16
520	208	173	149	130	116	104	87	74	65	52	35	30	26	23	21	19	17	16
530	212	177	151	133	118	106	88	76	66	53	35	30	27	24	21	19	18	16
540	216	180	154	135	120	108	90	77	68	54	36	31	27	24	22	20	18	17
550	220	183	157	138	122	110	92	79	69	55	37	31	28	24	22	20	18	17
560	224	187	160	140	124	112	93	80	70	56	37	32	28	25	22	20	19	17
570	228	190	163	143	127	114	95	81	71	57	38	33	29	25	23	21	19	18
580	232	193	166	145	129	116	97	83	73	58	39	33	29	26	23	21	19	18
590	236	197	169	148	131	118	98	84	74	59	39	34	30	26	24	21	20	18
600	240	200	171	150	133	120	100	86	75	60	40	34	30	27	24	22	20	18
610	244	203	174	153	136	122	102	87	76	61	41	35	31	27	24	22	20	19
620	248	207	177	155	138	124	103	89	78	62	41	35	31	28	25	22	21	19
630	252	210	180	158	140	126	105	90	79	63	42	36	32	28	25	23	21	19
640	256	213	183	160	142	128	107	91	80	64	43	37	32	28	26	23	21	20
650	260	217	186	163	144	130	108	93	81	65	43	37	33	29	26	24	22	20
660	264	220	189	165	147	132	110	94	83	66	44	38	33	29	26	24	22	20
670	268	223	191	168	149	134	112	96	84	67	45	38	34	30	27	24	22	21
680	272	227	194	170	151	136	113	97	85	68	45	39	34	30	27	25	23	21
690	276	230	197	173	153	138	115	99	86	69	46	39	35	31	28	25	23	21
700	280	233	200	175	156	140	117	100	88	70	47	40	35	31	28	25	23	22
710	284	237	203	178	158	142	118	101	89	71	47	41	36	32	28	26	24	22
720	288	240	206	180	160	144	120	103	90	72	48	41	36	32	29	26	24	22
730	292	243	209	183	162	146	122	104	91	73	49	42	37	32	29	26	24	22
740	296	247	211	185	164	148	123	106	93	74	49	42	37	33	30	27	25	23
750	300	250	214	188	167	150	125	107	94	75	50	43	38	33	30	27	25	23
760	304	253	217	190	169	152	127	109	95	76	51	43	38	34	30	28	25	23
770	308	257	220	193	171	154	128	110	96	77	51	44	39	34	31	28	26	24
780	312	260	223	195	173	156	130	111	98	78	52	45	39	35	31	28	26	24
790	316	263	226	198	176	158	132	113	99	79	53	45	40	35	32	29	26	24
800	320	267	229	200	178	160	133	114	100	80	53	46	40	36	32	29	27	25
810	324	270	231	203	180	162	135	116	101	81	54	46	41	36	32	29	27	25
820	328	273	234	205	182	164	137	117	103	82	55	47	41	36	33	30	27	25
830	332	277	237	208	184	166	138	119	104	83	55	47	42	37	33	30	28	26
840	336	280	240	210	187	168	140	120	105	84	56	48	42	37	34	30	28	26
850	340	283	243	213	189	170	142	121	106	85	57	49	43	38	34	31	28	26
860	344	287	246	215	191	172	143	123	108	86	57	49	43	38	34	31	29	26
870	348	290	249	218	193	174	145	124	109	87	58	50	44	39	35	32	29	27
880	352	293	251	220	196	176	147	126	110	88	59	50	44	39	35	32	29	27
890	356	297	254	223	198	178	148	127	111	89	59	51	45	40	36	32	30	27
900	360	300	257	225	200	180	150	129	113	90	60	51	45	40	36	33	30	28
910	364	303	260	228	202	182	152	130	114	91	61	52	46	40	36	33	30	28
920	368	307	263	230	204	184	153	131	115	92	61	53	46	41	37	33	31	28
930	372	310	266	233	207	186	155	133	116	93	62	53	47	41	37	34	31	29
940	376	313	269	235	209	188	157	134	118	94	63	54	47	42	38	34	31	29
950	380	317	271	238	211	190	158	136	119	95	63	54	48	42	38	34	32	29
960	384	320	274	240	213	192	160	137	120	96	64	55	48	43	38	35	32	30
970	388	323	277	243	216	194	162	139	121	97	65	55	49	43	39	35	32	30
980	392	327	280	245	218	196	163	140	123	98	65	56	49	44	39	36	33	30
990	396	330	283	248	220	198	165	141	124	99	66	57	50	44	40	36	33	30
1000	400	333	286	250	202	200	167	143	125	100	67	57	50	44	40	36	33	31
1020	408	340	291	255	227	204	170	146	128	102	68	58	51	45	41	37	34	31
1040	416	347	297	260	231	208	173	149	130	104	69	59	52	46	42	38	35	32
1060	424	353	303	265	236	212	177	152	133	106	71	61	53	47	42	39	35	33
1080	432	360	309	270	240	216	180	154	135	108	72	62	54	48	43	39	36	33
1100	440	367	314	275	244	220	183	157	138	110	73	63	55	49	44	40	37	34
1120	448	373	320	280	249	224	187	160	140	112	75	64	56	50	45	41	37	34
1140	456	380	326	285	253	228	190	163	143	114	76	65	57	51	46	42	38	35
1160	464	387	331	290	258	232	193	166	145	116	77	66	58	52	46	42	39	36
1180	472	393	337	295	262	236	197	169	148	118	79	67	59	52	47	43	39	36

Amt.	RATE.																	
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200
450	13	12	11	11	10	9	9	8	8	6	6	5	5	4	3	3	3	2
460	13	12	11	11	10	9	9	8	7	6	6	5	5	4	3	3	3	2
470	13	13	12	11	10	10	9	9	8	7	6	5	5	4	4	3	3	2
480	14	13	12	11	11	10	10	9	8	7	6	5	5	4	4	3	3	2
490	14	13	12	12	11	10	10	9	8	7	6	5	5	4	4	3	3	2
500	14	13	13	12	11	11	10	9	8	7	6	6	5	4	4	3	3	3
510	15	14	13	12	11	11	10	9	9	7	6	6	5	4	4	3	3	3
520	15	14	13	12	12	11	10	9	9	7	7	6	5	5	4	3	3	3
530	15	14	13	12	12	11	11	10	9	8	7	6	5	5	4	4	3	3
540	15	14	14	13	12	11	11	10	9	8	7	6	5	5	4	4	3	3
550	16	15	14	13	12	12	11	10	9	8	7	6	6	5	4	4	3	3
560	16	15	14	13	12	12	11	10	9	8	7	6	6	5	4	4	3	3
570	16	15	14	13	13	12	11	10	10	8	7	6	6	5	4	4	3	3
580	17	15	15	14	13	12	12	11	10	8	7	6	6	5	4	4	3	3
590	17	16	15	14	13	12	12	11	10	8	7	7	6	5	5	4	3	3
600	17	16	15	14	13	13	12	11	10	9	8	7	6	5	5	4	3	3
610	17	16	15	14	14	13	12	11	10	9	8	7	6	5	5	4	3	3
620	18	17	16	15	14	13	12	11	10	9	8	7	6	5	5	4	4	3
630	18	17	16	15	14	13	13	11	11	9	8	7	6	5	5	4	4	3
640	18	17	16	15	14	13	13	12	11	9	8	7	6	6	5	4	4	3
650	19	17	16	15	14	14	13	12	11	9	8	7	7	6	5	4	4	3
660	19	18	17	16	15	14	13	12	11	9	8	7	7	6	5	4	4	3
670	19	18	17	16	15	14	13	12	11	10	8	7	7	6	5	4	4	3
680	19	18	17	16	15	14	14	12	11	10	9	8	7	6	5	5	4	3
690	20	18	17	16	15	15	14	13	12	10	9	8	7	6	5	5	4	3
700	20	19	18	16	16	15	14	13	12	10	9	8	7	6	5	5	4	4
710	20	19	18	17	16	15	14	13	12	10	9	8	7	6	5	5	4	4
720	21	19	18	17	16	15	14	13	12	10	9	8	7	6	6	5	4	4
730	21	19	18	17	16	15	15	13	12	10	9	8	7	6	6	5	4	4
740	21	20	19	17	16	16	15	13	12	11	9	8	7	6	6	5	4	4
750	21	20	19	18	17	16	15	14	13	11	9	8	8	6	6	5	4	4
760	22	20	19	18	17	16	15	14	13	11	10	8	8	7	6	5	4	4
770	22	21	19	18	17	16	15	14	13	11	10	9	8	7	6	5	4	4
780	22	21	20	18	17	16	16	14	13	11	10	9	8	7	6	5	4	4
790	23	21	20	19	18	17	16	14	13	11	10	9	8	7	6	5	5	4
800	23	21	20	19	18	17	16	15	13	11	10	9	8	7	6	5	5	4
810	23	22	20	19	18	17	16	15	14	12	10	9	8	7	6	5	5	4
820	23	22	21	19	18	17	16	15	14	12	10	9	8	7	6	5	5	4
830	24	22	21	20	18	17	17	15	14	12	10	9	8	7	6	6	5	4
840	24	22	21	20	19	18	17	15	14	12	11	9	8	7	6	6	5	4
850	24	23	21	20	19	18	17	15	14	12	11	9	9	7	7	6	5	4
860	25	23	22	20	19	18	17	16	14	12	11	10	9	7	7	6	5	4
870	25	23	22	20	19	18	17	16	15	12	11	10	9	8	7	6	5	4
880	25	23	22	21	20	19	18	16	15	13	11	10	9	8	7	6	5	4
890	25	24	22	21	20	19	18	16	15	13	11	10	9	8	7	6	5	4
900	26	24	23	21	20	19	18	16	15	13	11	10	9	8	7	6	5	5
910	26	24	23	21	20	19	18	17	15	13	11	10	9	8	7	6	5	5
920	26	25	23	22	20	19	18	17	15	13	12	10	9	8	7	6	5	5
930	27	25	23	22	21	20	19	17	16	13	12	10	9	8	7	6	5	5
940	27	25	24	22	21	20	19	17	16	13	12	10	9	8	7	6	5	5
950	27	25	24	22	21	20	19	17	16	14	12	11	10	8	7	6	5	5
960	27	26	24	23	21	20	19	17	16	14	12	11	10	8	7	6	5	5
970	28	26	24	23	22	20	19	18	16	14	12	11	10	8	7	6	5	5
980	28	26	25	23	22	21	20	18	16	14	12	11	10	8	8	7	6	5
990	28	26	25	23	22	21	20	18	17	14	12	11	10	9	8	7	6	5
1000	29	27	25	24	22	21	20	18	17	14	13	11	10	9	8	7	6	5
1020	29	27	26	24	23	21	20	19	17	15	13	11	10	9	8	7	6	5
1040	30	28	26	24	23	22	21	19	17	15	13	12	10	9	8	7	6	5
1060	30	28	27	25	24	22	21	19	18	15	13	12	11	9	8	7	6	5
1080	31	29	27	25	24	23	22	20	18	15	14	12	11	9	8	7	6	5
1100	31	29	28	26	24	23	22	20	18	16	14	12	11	10	8	7	6	6
1120	32	30	28	26	25	24	22	20	19	16	14	12	11	10	9	8	6	6
1140	33	30	29	27	25	24	23	21	19	16	14	13	11	10	9	8	7	6
1160	33	31	29	27	26	25	23	21	19	17	15	13	12	10	9	8	7	6
1180	34	31	30	28	26	25	24	21	20	17	15	13	12	11	9	8	7	6

Amt.	RATE.																		
	2½	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½	
1200	480	400	343	300	267	240	200	171	150	120	80	69	60	53	48	44	40	37	
1220	488	407	349	305	271	244	203	174	153	122	81	70	61	54	49	44	41	38	
1240	496	413	354	310	276	248	207	177	155	124	83	71	62	55	50	45	41	38	
1260	504	420	360	315	280	252	210	180	158	126	84	72	63	56	50	46	42	39	
1280	512	427	366	320	284	256	213	183	160	128	85	73	64	57	51	47	43	39	
1300	520	433	371	325	289	260	217	186	163	130	87	74	65	58	52	47	43	40	
1320	528	440	377	330	293	264	220	189	165	132	88	75	66	59	53	48	44	41	
1340	536	447	383	335	298	268	223	191	168	134	89	77	67	60	54	49	45	41	
1360	544	453	389	340	302	272	227	194	170	136	91	78	68	60	54	49	45	42	
1380	552	460	394	345	307	276	230	197	173	138	92	79	69	61	55	50	46	42	
1400	560	467	400	350	311	280	233	200	175	140	93	80	70	62	56	51	47	43	
1420	568	473	406	355	316	284	237	203	178	142	95	81	71	63	57	52	47	44	
1440	576	480	411	360	320	288	240	206	180	144	96	82	72	64	58	52	48	44	
1460	584	487	417	365	324	292	243	209	183	146	97	83	73	65	58	53	49	45	
1480	592	493	423	370	329	296	247	211	185	148	99	85	74	66	59	54	49	46	
1500	600	500	429	375	333	300	250	214	188	150	100	86	75	67	60	55	50	46	
1520	608	507	434	380	338	304	253	217	190	152	101	87	76	68	61	55	51	47	
1540	616	513	440	385	342	308	257	220	193	154	103	88	77	68	62	56	51	47	
1560	624	520	446	390	347	312	260	223	195	156	104	89	78	69	62	57	52	48	
1580	632	527	451	395	351	316	263	226	198	158	105	90	79	70	63	57	53	49	
1600	640	533	457	400	356	320	267	229	200	160	107	91	80	71	64	58	53	49	
1620	648	540	463	405	360	324	270	231	203	162	108	93	81	72	65	59	54	50	
1640	656	547	469	410	364	328	273	234	205	164	109	94	82	73	66	60	55	50	
1660	664	553	474	415	369	332	277	237	208	166	111	95	83	74	66	60	55	51	
1680	672	560	480	420	373	336	280	240	210	168	112	96	84	75	67	61	56	52	
1700	680	567	486	425	378	340	283	243	213	170	113	97	85	76	68	62	57	52	
1720	688	573	491	430	382	344	287	246	215	172	115	98	86	76	69	63	57	53	
1740	696	580	497	435	387	348	290	249	218	174	116	99	87	77	70	63	58	54	
1760	704	587	503	440	391	352	293	251	220	176	117	101	88	78	70	64	59	54	
1780	712	593	509	445	396	356	297	254	223	178	119	102	89	79	71	65	59	55	
1800	720	600	514	450	400	360	300	257	225	180	120	103	90	80	72	65	60	55	
1820	728	607	520	455	404	364	303	260	228	182	121	104	91	81	73	66	61	56	
1840	736	613	526	460	409	368	307	263	230	184	123	105	92	82	74	67	61	57	
1860	744	620	531	465	413	372	310	266	233	186	124	106	93	83	74	68	62	57	
1880	752	627	537	470	418	376	313	269	235	188	125	107	94	84	75	68	63	58	
1900	760	633	543	475	422	380	317	271	238	190	127	109	95	84	76	69	63	58	
1920	768	640	549	480	427	384	320	274	240	192	128	110	96	85	77	70	64	59	
1940	776	647	554	485	431	388	323	277	243	194	129	111	97	86	78	71	65	60	
1960	784	653	560	490	436	392	327	280	245	196	131	112	98	87	78	71	65	60	
1980	792	660	566	495	440	396	330	283	248	198	132	113	99	88	79	72	66	61	
2000	800	667	571	500	444	400	333	286	250	200	133	114	100	89	80	73	67	62	
2020	808	673	577	505	449	404	337	289	253	202	135	115	101	90	81	73	67	62	
2040	816	680	583	510	453	408	340	291	255	204	136	117	102	91	82	74	68	63	
2060	824	687	589	515	458	412	343	294	258	206	137	118	103	92	82	75	69	63	
2080	832	693	594	520	462	416	347	297	260	208	139	119	104	92	83	76	69	64	
2100	840	700	600	525	467	420	350	300	263	210	140	120	105	93	84	76	70	65	
2120	848	707	606	530	471	424	353	303	265	212	141	121	106	94	85	77	71	65	
2140	856	713	611	535	476	428	357	306	268	214	143	122	107	95	86	78	71	66	
2160	864	720	617	540	480	432	360	309	270	216	144	123	108	96	86	79	72	66	
2180	872	727	623	545	484	436	363	311	273	218	145	125	109	97	87	79	73	67	
2200	880	733	629	550	489	440	367	314	275	220	147	126	110	98	88	80	73	68	
2220	888	740	634	555	493	444	370	317	278	222	148	127	111	99	89	81	74	68	
2240	896	747	640	560	498	448	373	320	280	224	149	128	112	100	90	81	75	69	
2260	904	753	646	565	502	452	377	323	283	226	151	129	113	100	90	82	75	70	
2280	912	760	651	570	507	456	380	326	285	228	152	130	114	101	91	83	76	70	
2300	920	767	657	575	511	460	383	329	288	230	153	131	115	102	92	84	77	71	
2320	928	773	663	580	516	464	387	331	290	232	155	133	116	103	93	84	77	71	
2340	936	780	669	585	520	468	390	334	293	234	156	134	117	104	94	85	78	72	
2360	944	787	674	590	524	472	393	337	295	236	157	135	118	105	94	86	79	73	
2380	952	793	680	595	529	476	397	340	298	238	159	136	119	106	95	87	79	73	
2400	960	800	686	600	533	480	400	343	300	240	160	137	120	107	96	87	80	74	
2420	968	807	691	605	538	484	403	346	303	242	161	138	121	108	97	88	81	74	
2440	976	813	697	610	542	488	407	349	305	244	163	139	122	108	98	89	81	75	
2460	984	820	703	615	547	492	410	351	308	246	164	141	123	109	98	89	82	76	
2480	992	827	709	620	551	496	413	354	310	248	165	142	124	110	99	90	83	76	

Square Foot of Glass Surface, Wall Surface, or Cubic Feet.

1200 to 2480

SEE EXPLANATION, PAGE 61¹.

Amt.	RATE.																		
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200	
1200	34	32	30	28	27	25	24	22	20	17	15	13	12	10	9	8	7	6	
1220	35	33	31	29	27	26	24	22	20	17	15	14	12	11	9	8	7	6	
1240	35	33	31	29	28	26	25	23	21	18	16	14	12	11	10	8	7	6	
1260	36	34	32	30	28	27	25	23	21	18	16	14	13	11	10	8	7	6	
1280	37	34	32	30	28	27	26	23	21	18	16	14	13	11	10	9	7	6	
1300	37	35	33	31	29	27	26	24	22	19	16	14	13	11	10	9	7	7	
1320	38	35	33	31	29	28	26	24	22	19	17	15	13	11	10	9	8	7	
1340	38	36	34	32	30	28	27	24	22	19	17	15	13	12	10	9	8	7	
1360	39	36	34	32	30	29	27	25	23	19	17	15	14	12	10	9	8	8	
1380	39	37	35	32	31	29	28	25	23	20	17	15	14	12	11	9	8		
1400	40	37	35	33	31	29	28	25	23	20	18	16	14	12	11	9	8	7	
1420	41	38	36	33	32	30	28	26	24	20	18	16	14	12	11	9	8	7	
1440	41	38	36	34	32	30	29	26	24	21	18	16	14	12	11	10	8	7	
1460	42	39	37	34	32	31	29	27	24	21	18	16	15	13	11	10	8	7	
1480	42	39	37	35	33	31	30	27	25	21	19	16	15	13	11	10	8	7	
1500	43	40	38	35	33	32	30	27	25	21	19	17	15	13	12	10	9	8	
1520	43	41	38	36	34	32	30	28	25	22	19	17	15	13	12	10	9	8	
1540	44	41	39	36	34	32	31	28	26	22	19	17	15	13	12	10	9	8	
1560	45	42	39	37	35	33	31	28	26	22	20	17	16	14	12	10	9	8	
1580	45	42	40	37	35	33	32	29	26	23	20	18	16	14	12	11	9	8	
1600	46	43	40	38	36	34	32	29	27	23	20	18	16	14	12	11	9	8	
1620	46	43	41	38	36	34	32	29	27	23	20	18	16	14	12	11	9	8	
1640	47	44	41	39	36	35	33	30	27	23	21	18	16	14	13	11	9	8	
1660	47	44	42	39	37	35	33	30	28	24	21	18	17	14	13	11	9	8	
1680	48	45	42	40	37	35	34	31	28	24	21	19	17	15	13	11	10	8	
1700	49	45	43	40	38	36	34	31	28	24	21	19	17	15	13	11	10	9	
1720	49	46	43	40	38	36	34	31	29	25	22	19	17	15	13	11	10	9	
1740	50	46	44	41	39	37	35	32	29	25	22	19	17	15	13	12	10	9	
1760	50	47	44	41	39	37	35	32	29	25	22	20	18	15	14	12	10	9	
1780	51	47	45	42	40	37	36	32	30	25	22	20	18	15	14	12	10	9	
1800	51	48	45	42	40	38	36	33	30	26	23	20	18	16	14	12	10	9	
1820	52	49	46	43	40	38	36	33	30	26	23	20	18	16	14	12	10	9	
1840	53	49	46	43	41	39	37	33	31	26	23	20	18	16	14	12	11	9	
1860	53	50	47	44	41	39	37	34	31	27	23	21	19	16	14	12	11	9	
1880	54	50	47	44	42	40	38	34	31	27	24	21	19	16	14	13	11	9	
1900	54	51	48	45	42	40	38	35	32	27	24	21	19	16	15	13	11	10	
1920	55	51	48	45	43	40	38	35	32	27	24	21	19	17	15	13	11	10	
1940	55	52	49	46	43	41	39	35	32	28	24	22	19	17	15	13	11	10	
1960	56	52	49	46	44	41	39	36	33	28	25	22	20	17	15	13	11	10	
1980	57	53	50	47	44	42	40	36	33	28	25	22	20	17	15	13	11	10	
2000	57	53	50	47	44	42	40	36	33	29	25	22	20	17	15	13	11	10	
2020	58	54	51	48	45	43	40	37	34	29	25	22	20	18	16	13	12	10	
2040	58	54	51	48	45	43	41	37	34	29	26	23	20	18	16	14	12	10	
2060	59	55	52	48	46	43	41	37	34	29	26	23	21	18	16	14	12	10	
2080	59	55	52	49	46	44	42	38	35	30	26	23	21	18	16	14	12	10	
2100	60	56	53	49	47	44	42	38	35	30	26	23	21	18	16	14	12	11	
2120	61	57	53	50	47	45	42	39	35	30	27	24	21	18	16	14	12	11	
2140	61	57	54	50	48	45	43	39	36	31	27	24	21	19	16	14	12	11	
2160	62	58	54	51	48	45	43	39	36	31	27	24	22	19	17	14	12	11	
2180	62	58	55	51	48	46	44	40	36	31	27	24	22	19	17	15	12	11	
2200	63	59	55	52	49	46	44	40	37	31	28	24	22	19	17	15	12	11	
2220	63	59	56	52	49	47	44	40	37	32	28	25	22	19	17	15	13	11	
2240	64	60	56	53	50	47	45	41	37	32	28	25	22	19	17	15	13	11	
2260	65	60	57	53	50	48	45	41	38	32	28	25	23	20	17	15	13	11	
2280	65	61	57	54	51	48	46	41	38	33	29	25	23	20	18	15	13	11	
2300	66	61	58	54	51	48	46	42	38	33	29	26	23	20	18	15	13	12	
2320	66	62	58	55	52	49	46	42	39	33	29	26	23	20	18	15	13	12	
2340	67	62	59	55	52	49	47	43	39	33	29	26	23	20	18	16	13	12	
2360	67	63	59	56	52	50	47	43	39	34	30	26	24	20	18	16	13	12	
2380	68	63	60	56	53	50	48	43	40	34	30	26	24	21	18	16	13	12	
2400	69	64	60	56	53	51	48	44	40	34	30	27	24	21	18	16	14	12	
2420	69	65	61	57	54	51	48	44	40	35	30	27	24	21	19	16	14	12	
2440	70	65	61	57	54	51	49	44	41	35	31	27	24	21	19	16	14	12	
2460	70	66	62	58	55	52	49	45	41	35	31	27	25	21	19	16	14	12	
2480	71	66	62	58	55	52	50	45	41	35	31	28	25	22	19	17	14	12	

Amt.	RATE.																		
	2½	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½	
2500	1000	833	714	625	556	500	417	357	313	250	167	143	125	111	100	91	83	77	
2520	1008	840	720	630	560	504	420	360	315	252	168	144	126	112	101	92	84	78	
2540	1016	847	726	635	564	508	423	363	318	254	169	145	127	113	102	92	85	78	
2560	1024	853	731	640	569	512	427	366	320	256	171	146	128	114	102	93	85	79	
2580	1032	860	737	645	573	516	430	369	323	258	172	147	129	115	103	94	86	79	
2600	1040	867	743	650	578	520	433	371	325	260	173	149	130	116	104	95	87	80	
2620	1048	873	749	655	582	524	437	374	328	262	175	150	131	116	105	95	87	81	
2640	1056	880	754	660	587	528	440	377	330	264	176	151	132	117	106	96	88	81	
2660	1064	887	760	665	591	532	443	380	333	266	177	152	133	118	106	97	89	82	
2680	1072	893	766	670	596	536	447	383	335	268	179	153	134	119	107	97	89	82	
2700	1080	900	771	675	600	540	450	386	338	270	180	154	135	120	108	98	90	83	
2720	1088	907	777	680	604	544	453	389	340	272	181	155	136	121	109	99	91	84	
2740	1096	913	783	685	609	548	457	391	343	274	183	157	137	122	110	100	91	84	
2760	1104	920	789	690	613	552	460	394	345	276	184	158	138	123	110	100	92	85	
2780	1112	927	794	695	618	556	463	397	348	278	185	159	139	124	111	101	93	86	
2800	1120	933	800	700	622	560	467	400	350	280	187	160	140	124	112	102	93	86	
2820	1128	940	806	705	627	564	470	403	353	282	188	161	141	125	113	103	94	87	
2840	1136	947	811	710	631	568	473	406	355	284	189	162	142	126	114	103	95	87	
2860	1144	953	817	715	636	572	477	409	358	286	191	163	143	127	114	104	95	88	
2880	1152	960	823	720	640	576	480	411	360	288	192	165	144	128	115	105	96	89	
2900	1160	967	829	725	644	580	483	414	363	290	193	166	145	129	116	105	97	89	
2920	1168	973	834	730	649	584	487	417	365	292	195	167	146	130	117	106	97	90	
2940	1176	980	840	735	653	588	490	420	368	294	196	168	147	131	118	107	98	90	
2960	1184	987	846	740	658	592	493	423	370	296	197	169	148	132	118	108	99	91	
2980	1192	993	851	745	662	596	497	426	373	298	199	170	149	132	119	108	99	92	
3000	1200	1000	857	750	667	600	500	429	375	300	200	171	150	133	120	109	100	92	
3050	1220	1017	871	763	678	610	508	436	381	305	203	174	153	136	122	111	102	94	
3100	1240	1033	886	775	689	620	517	443	388	310	207	177	155	138	124	113	103	95	
3150	1260	1050	900	788	700	630	525	450	394	315	210	180	158	140	126	115	105	97	
3200	1280	1067	914	800	711	640	533	457	400	320	213	183	160	142	128	116	107	98	
3250	1300	1083	929	813	722	650	542	464	406	325	217	186	163	144	130	118	108	100	
3300	1320	1100	943	825	733	660	550	471	412	330	220	189	165	147	132	120	110	102	
3350	1340	1117	957	838	744	670	558	479	419	335	223	191	168	149	134	122	112	103	
3400	1360	1133	971	850	756	680	567	486	425	340	227	194	170	151	136	124	113	105	
3450	1380	1150	986	863	767	690	575	493	431	345	230	197	173	153	138	125	115	106	
3500	1400	1167	1000	875	778	700	583	500	438	350	233	200	175	156	140	127	117	108	
3550	1420	1183	1014	888	789	710	592	507	444	355	237	203	178	158	142	129	118	109	
3600	1440	1200	1029	900	800	720	600	514	450	360	240	206	180	160	144	131	120	111	
3650	1460	1217	1043	913	811	730	608	521	456	365	243	209	183	162	146	133	122	112	
3700	1480	1233	1057	925	822	740	617	529	462	370	247	211	185	164	148	135	123	114	
3750	1500	1250	1071	938	833	750	625	536	469	375	250	214	188	167	150	136	125	115	
3800	1520	1267	1086	950	844	760	633	543	475	380	253	217	190	169	152	138	127	117	
3850	1540	1283	1100	963	856	770	642	550	481	385	257	220	193	171	154	140	128	118	
3900	1560	1300	1114	975	867	780	650	557	488	390	260	223	195	173	156	142	130	120	
3950	1580	1317	1129	988	878	790	658	564	494	395	263	226	198	176	158	144	132	122	
4000	1600	1333	1143	1000	889	800	667	571	500	400	267	229	200	178	160	145	133	123	
4050	1620	1350	1157	1013	900	810	675	579	506	405	270	231	203	180	162	147	135	125	
4100	1640	1367	1171	1025	911	820	683	586	512	410	273	234	205	182	164	149	137	126	
4150	1660	1383	1186	1038	922	830	692	593	519	415	277	237	208	184	166	151	138	128	
4200	1680	1400	1200	1050	933	840	700	600	525	420	280	240	210	187	168	153	140	129	
4250	1700	1417	1214	1063	944	850	708	607	531	425	283	243	213	189	170	155	142	131	
4300	1720	1433	1229	1075	956	860	717	614	538	430	287	246	215	191	172	156	143	132	
4350	1740	1450	1243	1088	967	870	725	621	544	435	290	249	218	193	174	158	145	134	
4400	1760	1467	1257	1100	978	880	733	629	550	440	293	251	220	196	176	160	147	135	
4450	1780	1483	1271	1113	989	890	742	636	556	445	297	254	223	198	178	162	148	137	
4500	1800	1500	1286	1125	1000	900	750	643	562	450	300	257	225	200	180	164	150	138	
4550	1820	1517	1300	1138	1011	910	758	650	569	455	303	260	228	202	182	165	152	140	
4600	1840	1533	1314	1150	1022	920	767	657	575	460	307	263	230	204	184	167	153	142	
4650	1860	1550	1329	1163	1033	930	775	664	581	465	310	266	233	207	186	169	155	143	
4700	1880	1567	1343	1175	1044	940	783	671	588	470	313	269	235	209	188	171	157	145	
4750	1900	1583	1357	1188	1056	950	792	679	594	475	317	271	238	211	190	173	158	146	
4800	1920	1600	1371	1200	1067	960	800	686	600	480	320	274	240	213	192	175	160	148	
4850	1940	1617	1386	1213	1078	970	808	693	606	485	323	277	243	216	194	176	162	149	
4900	1960	1633	1400	1225	1089	980	817	700	612	490	327	280	245	218	196	178	163	151	
4950	1980	1650	1414	1238	1100	990	825	707	619	495	330	283	248	220	198	180	165	152	

Square Foot of Glass Surface, Wall Surface, or Cubic Feet. 2500 to 4950.

SEE EXPLANATION, PAGE 61½

Ame.	RATE.																		
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200	
2500	71	67	63	59	56	53	50	45	42	36	31	28	25	22	19	17	14	13	
2520	72	67	63	59	56	53	50	46	42	36	32	28	25	22	19	17	14	13	
2540	73	68	64	60	56	53	51	46	42	36	32	28	25	22	20	17	15	13	
2560	73	68	64	60	57	54	51	47	43	37	32	28	26	22	20	17	15	13	
2580	74	69	65	61	57	54	52	47	43	37	32	29	26	22	20	17	15	13	
2600	74	69	65	61	58	55	52	47	43	37	33	29	26	23	20	17	15	13	
2620	75	70	66	62	58	55	52	48	44	37	33	29	26	23	20	17	15	13	
2640	75	70	66	62	59	56	53	48	44	38	33	29	26	23	20	18	15	13	
2660	76	71	67	63	59	56	53	48	44	38	33	30	27	23	20	18	15	13	
2680	77	71	67	63	60	56	54	49	45	38	34	30	27	23	21	18	15	13	
2700	77	72	68	64	60	57	54	49	45	39	34	30	27	23	21	18	15	14	
2720	78	73	68	64	60	57	54	49	45	39	34	30	27	24	21	18	16	14	
2740	78	73	69	64	61	58	55	50	46	39	34	30	27	24	21	18	16	14	
2760	79	74	69	65	61	58	55	50	46	39	35	31	28	24	21	18	16	14	
2780	79	74	70	65	62	59	56	51	46	40	35	31	28	24	21	19	16	14	
2800	80	75	70	66	62	59	56	51	47	40	35	31	28	24	22	19	16	14	
2820	81	75	71	66	63	59	56	51	47	40	35	31	28	25	22	19	16	14	
2840	81	76	71	67	63	60	57	52	47	41	36	32	28	25	22	19	16	14	
2860	82	76	72	67	64	60	57	52	48	41	36	32	29	25	22	19	16	14	
2880	82	77	72	68	64	61	58	52	48	41	36	32	29	25	22	19	16	14	
2900	83	77	73	68	64	61	58	53	48	41	36	32	29	25	22	19	17	15	
2920	83	78	73	69	65	61	58	53	49	42	37	32	29	25	22	19	17	15	
2940	84	78	74	69	65	62	59	53	49	42	37	33	29	26	23	20	17	15	
2960	85	79	74	70	66	62	59	54	49	42	37	33	30	26	23	20	17	15	
2980	85	79	75	70	66	63	60	54	50	43	37	33	30	26	23	20	17	15	
3000	86	80	75	71	67	63	60	55	50	43	38	33	30	26	23	20	17	15	
3050	87	81	76	72	68	64	61	55	51	44	38	34	31	27	23	20	17	15	
3100	89	83	78	73	69	65	62	56	52	44	39	34	31	27	24	21	18	16	
3150	90	84	79	74	70	66	63	57	53	45	39	35	32	27	24	21	18	16	
3200	91	85	80	75	71	67	64	58	53	46	40	36	32	28	25	21	18	16	
3250	93	87	81	76	72	68	65	59	54	46	41	36	33	28	25	22	19	16	
3300	94	88	83	78	73	69	66	60	55	47	41	37	33	29	25	22	19	17	
3350	96	89	84	79	74	71	67	61	56	48	42	37	34	29	26	22	19	17	
3400	97	91	85	80	76	72	68	62	57	49	43	38	34	30	26	23	19	17	
3450	99	92	86	81	77	73	69	63	58	49	43	38	35	30	27	23	20	17	
3500	100	93	88	82	78	74	70	64	58	50	44	39	35	30	27	23	20	18	
3550	101	95	89	84	79	75	71	65	59	51	44	39	36	31	27	24	20	18	
3600	103	96	90	85	80	76	72	65	60	51	45	40	36	31	28	24	21	18	
3650	104	97	91	86	81	77	73	66	61	52	46	41	37	32	28	24	21	18	
3700	106	99	93	87	82	78	74	67	62	53	46	41	37	32	28	25	21	19	
3750	107	100	94	88	83	79	75	68	63	54	47	42	38	33	29	25	21	19	
3800	109	101	95	89	84	80	76	69	63	54	48	42	38	33	29	25	22	19	
3850	110	103	96	91	86	81	77	70	64	55	48	43	39	33	30	26	22	19	
3900	111	104	98	92	87	82	78	71	65	56	49	43	39	34	30	26	22	20	
3950	113	105	99	93	88	83	79	72	66	56	49	44	40	34	30	26	23	20	
4000	114	107	100	94	89	84	80	73	67	57	50	44	40	35	31	27	23	20	
4050	116	108	101	95	90	85	81	74	68	58	51	45	41	35	31	27	23	20	
4100	117	109	103	96	91	86	82	75	68	59	51	46	41	36	32	27	23	21	
4150	119	111	104	98	92	87	83	75	69	59	52	46	42	36	32	28	24	21	
4200	120	112	105	99	93	88	84	76	70	60	53	47	42	37	32	28	24	21	
4250	121	113	106	100	94	89	85	77	71	61	53	47	43	37	33	28	24	21	
4300	123	115	108	101	96	91	86	78	72	61	54	48	43	37	33	29	25	22	
4350	124	116	109	102	97	92	87	79	73	62	54	48	44	38	33	29	25	22	
4400	126	117	110	104	98	93	88	80	73	63	55	49	44	38	34	29	25	22	
4450	127	119	111	105	99	94	89	81	74	64	56	49	45	39	34	30	25	22	
4500	129	120	113	106	100	95	90	82	75	64	56	50	45	39	35	30	26	23	
4550	130	121	114	107	101	96	91	83	76	65	57	51	46	40	35	30	26	23	
4600	131	123	115	108	102	97	92	84	77	66	58	51	46	40	35	31	26	23	
4650	133	124	116	109	103	98	93	85	78	66	58	52	47	40	36	31	27	23	
4700	134	125	118	111	104	99	94	85	78	67	59	52	47	41	36	31	27	24	
4750	136	127	119	112	106	100	95	86	79	68	59	53	48	41	37	32	27	24	
4800	137	128	120	113	107	101	96	87	80	69	60	53	48	42	37	32	27	24	
4850	139	129	121	114	108	102	97	88	81	69	61	54	49	42	37	32	28	24	
4900	140	131	123	115	109	103	98	89	82	70	61	54	49	43	38	33	28	25	
4950	141	132	124	116	110	104	99	90	83	71	62	55	50	43	38	33	28	25	

5000 to 300,000. Table Showing Radiation Necessary at Various Rates per

SEE EXPLANATION AT

Amt.	RATE.																	
	3	3½	4	4½	5	6	7	8	10	15	17½	20	22½	25	27½	30	32½	
5000	1667	1429	1250	1111	1000	833	714	625	500	333	286	250	222	200	182	167	154	
5050	1683	1443	1263	1122	1010	842	721	631	505	337	289	253	224	202	184	168	155	
5100	1700	1457	1275	1133	1020	850	729	638	510	340	291	255	227	204	185	170	157	
5150	1717	1471	1288	1144	1030	858	736	644	515	343	294	258	229	207	187	172	158	
5200	1733	1486	1300	1156	1040	867	743	650	520	347	297	260	231	208	189	173	160	
5250	1750	1500	1313	1167	1050	875	750	656	525	350	300	263	233	210	191	175	162	
5300	1767	1514	1325	1178	1060	883	757	663	530	353	303	265	236	212	193	177	163	
5350	1783	1529	1338	1189	1070	892	764	669	535	357	306	268	238	214	195	178	165	
5400	1800	1543	1350	1200	1080	900	771	675	540	360	309	270	240	216	196	180	166	
5450	1817	1557	1363	1211	1090	908	779	681	545	363	311	273	242	218	198	182	168	
5500	1833	1571	1375	1222	1100	917	786	688	550	367	314	275	244	220	200	183	169	
5550	1850	1586	1388	1233	1110	925	793	694	555	370	317	278	247	222	202	185	171	
5600	1867	1600	1400	1244	1120	933	800	700	560	373	320	280	249	224	204	187	172	
5650	1883	1614	1413	1256	1130	942	807	706	565	377	323	283	251	226	205	188	174	
5700	1900	1629	1425	1267	1140	950	814	713	570	380	326	285	253	228	207	190	175	
5750	1917	1643	1438	1278	1150	958	821	719	575	383	329	288	256	230	209	192	177	
5800	1933	1657	1450	1289	1160	967	829	725	580	387	331	290	258	232	211	193	178	
5850	1950	1671	1463	1300	1170	975	836	731	585	390	334	293	260	234	213	195	180	
5900	1967	1686	1475	1311	1180	983	843	738	590	393	337	295	262	236	215	197	182	
5950	1983	1700	1488	1322	1190	992	850	744	595	397	340	298	264	238	216	198	183	
6000	2000	1714	1500	1333	1200	1000	857	750	600	400	343	300	267	240	218	200	185	
6050	2017	1729	1513	1344	1210	1008	864	756	605	403	346	303	269	242	220	202	186	
6100	2033	1743	1525	1356	1220	1017	871	763	610	407	349	305	271	244	222	203	188	
6150	2050	1757	1538	1367	1230	1025	879	769	615	410	351	308	273	246	224	205	189	
6200	2067	1771	1550	1378	1240	1033	886	775	620	413	354	310	276	248	225	207	191	
6250	2083	1786	1563	1389	1250	1042	893	781	625	417	357	313	278	250	227	208	192	
6300	2100	1800	1575	1400	1260	1050	900	788	630	420	360	315	280	252	229	210	194	
6350	2117	1814	1588	1411	1270	1058	907	794	635	423	363	318	282	254	231	212	195	
6400	2133	1829	1600	1422	1280	1067	914	800	640	427	366	320	284	256	233	213	197	
6450	2150	1843	1613	1433	1290	1075	921	806	645	430	369	323	287	258	235	215	198	
6500	2167	1857	1625	1444	1300	1083	929	813	650	433	371	325	289	260	236	217	200	
6550	2183	1871	1638	1456	1310	1092	936	819	655	437	374	328	291	262	238	218	202	
6600	2200	1886	1650	1467	1320	1100	943	825	660	440	377	330	293	264	240	220	203	
6650	2217	1900	1663	1478	1330	1108	950	831	665	443	380	333	296	266	242	222	205	
6700	2233	1914	1675	1489	1340	1117	957	838	670	447	383	335	298	268	244	223	206	
6750	2250	1929	1688	1500	1350	1125	964	844	675	450	386	338	300	270	245	225	208	
6800	2267	1943	1700	1511	1360	1133	971	850	680	453	389	340	302	272	247	227	209	
6850	2283	1957	1713	1522	1370	1142	979	856	685	457	391	343	304	274	249	228	211	
6900	2300	1971	1725	1533	1380	1150	986	863	690	460	394	345	307	276	251	230	212	
6950	2317	1986	1738	1544	1390	1158	993	869	695	463	397	348	309	278	253	232	214	
7000	2333	2000	1750	1556	1400	1167	1000	875	700	467	400	350	311	280	255	233	215	
8000	2667	2286	2000	1778	1600	1334	1143	1000	800	533	457	400	356	320	291	267	246	
9000	3000	2571	2250	2000	1800	1500	1286	1125	900	600	514	450	400	360	327	300	277	
10000	3333	2857	2500	2222	2000	1667	1429	1250	1000	667	571	500	444	400	364	333	308	
20000	6667	5714	5000	4444	4000	3333	2857	2500	2000	1333	1143	1000	889	800	727	667	615	
30000	10000	8571	7500	6667	6000	5000	4286	3750	3000	2000	1714	1500	1333	1200	1091	1000	923	
40000	13333	11429	10000	8889	8000	6667	5714	5000	4000	2667	2286	2000	1778	1600	1455	1333	1231	
50000	16667	14286	12500	11111	10000	8333	7143	6250	5000	3333	2857	2500	2222	2000	1818	1667	1538	
60000	20000	17143	15000	13333	12000	10000	8571	7500	6000	4000	3429	3000	2667	2400	2182	2000	1846	
70000	23333	20000	17500	15556	14000	11667	10000	8750	7000	4667	4000	3500	3111	2800	2545	2333	2154	
80000	26667	22857	20000	17778	16000	13333	11429	10000	8000	5333	4571	4000	3556	3200	2909	2667	2462	
90000	30000	25714	22500	20000	18000	15000	12857	11250	9000	6000	5143	4500	4000	3600	3273	3000	2769	
100000	33333	28571	25000	22222	20000	16667	14286	12500	10000	6667	5714	5000	4444	4000	3636	3333	3077	
200000	66667	57143	50000	44444	40000	33333	28571	25000	20000	13333	11429	10000	8889	8000	7273	6667	6154	
300000	100000	85714	75000	66667	60000	50000	42857	37500	30000	20000	17143	15000	13333	12000	10909	10000	9231	

EXPLANATION TO TABLE ABOVE

The column of figures at the left of each page represents either square feet of glass surface, square feet of wall surface, or cubic feet.

The row of figures at the top are the rates.

The column of figures under each rate is the product of the column of figures on the left divided by that rate.

To ascertain the amount of radiation necessary to heat any given number of square feet of glass, or wall surface, or cubic feet, turn to the number in the left-hand column (under "Amt.") representing the amount to be warmed; look opposite this, and under the desired rate you will find the amount of radiation required at that rate.

BOTTOM OF THIS PAGE.

Amt.	RATE.																		
	35	37½	40	42½	45	47½	50	55	60	70	80	90	100	115	130	150	175	200	
5000	143	133	125	118	111	105	100	91	83	71	63	56	50	44	38	33	29	25	
5050	144	135	126	119	112	106	101	92	84	72	63	56	51	44	39	34	29	25	
5100	146	136	128	120	113	107	102	93	85	73	64	57	51	44	39	34	29	26	
5150	147	137	129	121	114	108	103	94	86	74	64	57	52	45	40	34	29	26	
5200	149	139	130	122	115	109	104	95	87	74	65	58	52	45	40	35	30	26	
5250	150	140	131	124	117	111	105	95	88	75	66	58	53	46	40	35	30	26	
5300	151	141	133	125	118	112	106	96	88	76	66	59	53	46	41	35	30	27	
5350	153	143	134	126	119	113	107	97	89	76	67	59	54	47	41	36	31	27	
5400	154	144	135	127	120	114	108	98	90	77	68	60	54	47	42	36	31	27	
5450	156	145	136	128	121	115	109	99	91	78	68	61	55	47	42	36	31	27	
5500	157	147	138	129	122	116	110	100	92	79	69	61	55	48	42	37	31	28	
5550	159	148	139	131	123	117	111	101	93	79	69	62	56	48	43	37	32	28	
5600	160	149	140	132	124	118	112	102	93	80	70	62	56	49	43	37	32	28	
5650	161	151	141	133	126	119	113	103	94	81	71	63	57	49	43	38	32	28	
5700	163	152	143	134	127	120	114	104	95	81	71	63	57	50	44	38	33	29	
5750	164	153	144	135	128	121	115	105	96	82	72	64	58	50	44	38	33	29	
5800	166	155	145	136	129	122	116	105	97	83	73	64	58	50	45	39	33	29	
5850	167	156	146	138	130	123	117	106	98	84	73	65	59	51	45	39	33	29	
5900	169	157	148	139	131	124	118	107	98	84	74	66	59	51	45	39	34	30	
5950	170	159	149	140	132	125	119	108	99	85	74	66	60	52	46	40	34	30	
6000	171	160	150	141	133	126	120	109	100	86	75	67	60	52	46	40	34	30	
6050	173	161	151	142	134	127	121	110	101	86	76	67	61	53	47	40	35	30	
6100	174	163	153	144	136	128	122	111	102	87	76	68	61	53	47	41	35	31	
6150	176	164	154	145	137	129	123	112	103	88	77	68	62	54	47	41	35	31	
6200	177	165	155	146	138	131	124	113	103	89	78	69	62	54	48	41	35	31	
6250	179	167	156	147	139	132	125	114	104	89	78	69	63	54	48	42	36	31	
6300	180	168	158	148	140	133	126	115	105	90	79	70	63	55	48	42	36	32	
6350	181	169	159	149	141	134	127	115	106	91	79	71	64	55	49	42	36	32	
6400	183	171	160	151	142	135	128	116	107	91	80	71	64	56	49	43	37	32	
6450	184	172	161	152	143	136	129	117	108	92	81	72	65	56	50	43	37	32	
6500	186	173	163	153	144	137	130	118	108	93	81	72	65	57	50	43	37	33	
6550	187	175	164	154	146	138	131	119	109	94	82	73	66	57	50	44	37	33	
6600	189	176	165	155	147	139	132	120	110	94	83	73	66	57	51	44	38	33	
6650	190	177	166	156	148	140	133	121	111	95	83	74	67	58	51	44	38	33	
6700	191	179	168	158	149	141	134	122	112	96	84	74	67	58	52	45	38	34	
6750	193	180	169	159	150	142	135	123	113	96	84	75	68	59	52	45	39	34	
6800	194	181	170	160	151	143	136	124	113	97	85	76	68	59	52	45	39	34	
6850	196	183	171	161	152	144	137	125	114	98	86	76	69	60	53	46	39	34	
6900	197	184	173	162	153	145	138	125	115	99	86	77	69	60	53	46	39	35	
6950	199	185	174	164	154	146	139	126	116	99	87	77	70	60	53	46	40	35	
7000	200	187	175	165	156	147	140	127	117	100	88	78	70	61	54	47	40	35	
8000	229	213	200	188	178	168	160	145	133	114	100	89	80	70	62	53	46	40	
9000	257	240	225	212	200	189	180	164	150	129	113	100	90	78	69	60	51	45	
10000	286	267	250	235	222	211	200	182	167	143	125	111	100	87	77	67	57	50	
20000	571	533	500	471	444	421	400	364	333	286	250	222	200	174	154	133	114	100	
30000	857	800	750	706	667	632	600	545	500	429	375	333	300	261	231	200	171	150	
40000	1143	1067	1000	941	889	842	800	727	667	571	500	444	400	348	308	267	229	200	
50000	1429	1333	1250	1176	1111	1053	1000	909	833	714	625	556	500	435	385	333	286	250	
60000	1714	1600	1500	1412	1333	1263	1200	1091	1000	857	750	667	600	522	462	400	343	300	
70000	2000	1867	1750	1647	1556	1474	1400	1273	1167	1000	875	778	700	609	538	467	400	350	
80000	2286	2133	2000	1882	1778	1684	1600	1455	1333	1143	1000	889	800	696	615	533	457	400	
90000	2571	2400	2250	2118	2000	1895	1800	1636	1500	1286	1125	1000	900	783	692	600	514	450	
100000	2857	2667	2500	2353	2222	2105	2000	1818	1667	1429	1250	1111	1000	870	769	667	571	500	
200000	5714	5333	5000	4706	4444	4210	4000	3636	3333	2857	2500	2222	2000	1739	1538	1333	1143	1000	
300000	8571	8000	7500	7059	6667	6315	6000	5455	5000	4286	3750	3333	3000	2609	2308	2000	1714	1500	

PAGES 58 TO 61 INCLUSIVE.

EXAMPLE: Find the radiation necessary to heat a room 13½x19½x9½ feet, figuring by cubical contents only and supposing it requires 1 square foot of radiation for each 37½ cubic feet. We will first get the cubical contents by referring to page 15, where we find it to be 2,500. We next look for 2,500 in the left-hand column of the above table and find it at the top of page 61; following across the page on a line opposite this number (2,500) till we come under the rate 37½, we find 67, which represents the square feet of radiation necessary to heat the above room at 1 to 37½.

Proceed in the same manner for glass or wall surface, referring to page 62 to ascertain square feet of surface when dimensions are known.

SQUARE FEET OF GLASS OR WALL

Continued on following

Feet. Inches	1	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	5 3/4
2	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4
3	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2	7 3/4
4	4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2	7 3/4	8	8 1/4	8 1/2	8 3/4
5	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2	7 3/4	8	8 1/4	8 1/2	8 3/4	9	9 1/4	9 1/2	9 3/4
6	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2	7 3/4	8	8 1/4	8 1/2	8 3/4	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	10 3/4
7	7	7 1/4	7 1/2	7 3/4	8	8 1/4	8 1/2	8 3/4	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	10 3/4	11	11 1/4	11 1/2	11 3/4
8	8	8 1/4	8 1/2	8 3/4	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	10 3/4	11	11 1/4	11 1/2	11 3/4	12	12 1/4	12 1/2	12 3/4
9	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	10 3/4	11	11 1/4	11 1/2	11 3/4	12	12 1/4	12 1/2	12 3/4	13	13 1/4	13 1/2	13 3/4
10	10	10 1/4	10 1/2	10 3/4	11	11 1/4	11 1/2	11 3/4	12	12 1/4	12 1/2	12 3/4	13	13 1/4	13 1/2	13 3/4	14	14 1/4	14 1/2	14 3/4
11	11	11 1/4	11 1/2	11 3/4	12	12 1/4	12 1/2	12 3/4	13	13 1/4	13 1/2	13 3/4	14	14 1/4	14 1/2	14 3/4	15	15 1/4	15 1/2	15 3/4
12	12	12 1/4	12 1/2	12 3/4	13	13 1/4	13 1/2	13 3/4	14	14 1/4	14 1/2	14 3/4	15	15 1/4	15 1/2	15 3/4	16	16 1/4	16 1/2	16 3/4
13	13	13 1/4	13 1/2	13 3/4	14	14 1/4	14 1/2	14 3/4	15	15 1/4	15 1/2	15 3/4	16	16 1/4	16 1/2	16 3/4	17	17 1/4	17 1/2	17 3/4
14	14	14 1/4	14 1/2	14 3/4	15	15 1/4	15 1/2	15 3/4	16	16 1/4	16 1/2	16 3/4	17	17 1/4	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4
15	15	15 1/4	15 1/2	15 3/4	16	16 1/4	16 1/2	16 3/4	17	17 1/4	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4	19	19 1/4	19 1/2	19 3/4
16	16	16 1/4	16 1/2	16 3/4	17	17 1/4	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4	19	19 1/4	19 1/2	19 3/4	20	20 1/4	20 1/2	20 3/4
17	17	17 1/4	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4	19	19 1/4	19 1/2	19 3/4	20	20 1/4	20 1/2	20 3/4	21	21 1/4	21 1/2	21 3/4

NOTE: Always take numbers at the top for the height and numbers at the side for the length. Follow down the column under the height until you come exactly opposite the length, and where the imaginary lines cross you will find the number of square feet. No fractions less than 1/4 are used. For convenience this table is indexed both in

SURFACE 12 X 17 FEET AND SMALLER.

pages see note.

Feet. Inches	51	54	57	5	64	68	72	76	80	7	84	88	92	8	96	100	104	9	108	112	116	10	120	124	128	1	136	12
Ft. In.																												
	51	17																										
	54	19	20																									
	57	20	21	22																								
5	60	21	22	23	25																							
	64	22	24	25	26	28																						
6	68	24	25	27	28	30	31																					
	72	25	27	28	30	32	34	36																				
	76	27	28	30	31	33	36	38	40																			
7	80	28	30	31	33	35	37	40	42	44																		
	84	29	31	33	35	37	39	42	44	46	49																	
	88	31	33	34	36	39	41	44	46	49	51	53																
8	92	32	34	36	38	41	43	46	48	51	53	56	58															
	96	34	36	38	40	42	45	48	50	53	56	58	61	64														
9	100	35	37	39	41	44	47	50	52	55	58	61	64	66														
	104	36	39	41	43	46	49	52	55	57	60	63	66	69	72													
	108	38	40	42	45	48	51	54	57	60	63	66	69	72	75	78												
	112	39	42	44	46	49	53	56	59	62	65	68	71	74	77	81	84											
	116	41	43	46	48	51	54	58	61	64	67	71	74	77	80	83	87	90										
10	120	42	45	47	50	53	56	60	63	66	70	73	76	80	83	86	90	93	96									
	124	43	46	49	51	55	58	62	65	69	72	75	79	82	86	89	93	96	100	103								
11	128	45	48	50	53	57	60	64	67	71	74	78	81	85	89	92	96	99	103	106	110							
	132	46	49	52	55	58	62	66	69	73	77	80	84	88	91	95	99	102	106	110	113	117						
	136	48	51	53	56	60	64	68	71	75	79	83	87	90	94	98	102	105	109	113	117	121	124					
12	140	49	52	55	58	62	66	70	74	77	81	85	89	93	97	101	105	109	113	117	121	125	129	132				
	144	51	54	57	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120	124	128	132	136	144			
	148	52	55	58	61	65	70	74	78	82	86	90	94	98	102	107	111	115	119	123	127	131	135	139	148			
13	152	53	57	60	63	67	71	76	80	84	88	93	97	101	105	109	114	118	122	126	131	136	140	144	152			
	156	55	58	61	65	69	73	78	82	86	91	95	99	104	108	112	117	121	125	130	134	138	143	147	156			
14	160	56	60	63	66	71	75	80	84	89	93	97	102	106	111	115	120	124	129	133	137	142	146	151	160			
	164	58	61	65	68	72	77	82	86	91	95	100	104	109	114	118	123	127	132	136	141	145	150	155	164			
	168	59	63	66	70	74	79	84	88	93	98	102	107	112	116	121	126	130	135	140	144	149	154	158	168			
	172	61	64	68	71	76	81	86	90	95	100	105	110	114	119	124	129	133	138	143	148	153	157	162	172			
	176	62	66	69	73	78	83	88	93	97	102	107	112	117	122	127	132	137	141	146	151	156	161	166	176			
15	180	63	67	71	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	180			
	184	65	69	72	76	81	87	92	97	102	107	112	117	122	127	133	138	143	148	153	158	163	168	173	184			
	188	66	70	74	78	83	88	94	99	104	109	115	120	125	130	135	141	146	151	156	162	167	172	177	188			
16	192	68	72	76	80	85	90	96	101	106	112	117	122	128	133	138	144	149	154	160	165	170	176	181	192			
	196	69	73	77	81	87	92	98	103	109	114	119	125	130	136	141	147	152	158	163	168	174	179	185	196			
17	200	70	75	79	83	89	94	100	105	111	116	122	127	133	139	144	150	155	161	166	172	177	183	189	200			
	204	72	76	80	85	90	96	102	107	113	119	124	130	136	141	147	153	158	164	170	175	181	187	192	204			

feet and inches and they can be used independently or together and the answer found is always square feet. For example, it makes no difference whether you say 3 ft. x 42 in., 36 in. x 3 1/2 ft. or 3 ft x 3 1/2 ft., all mean the same, and by consulting the table you will find in each case the result obtained, 10 1/2 sq. ft. is the same. Fractions of 1 sq. ft. not given in the above table.

SQUARE FEET OF GLASS OR WALL

SEE NOTE,

	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½	13	13½	14	14½	15
10½	63	68	73	78	84	89	94	99	105	110									
11	66	71	77	82	88	93	99	104	110	115	121								
11½	69	74	80	86	92	97	103	109	115	120	126	132							
12	72	78	84	90	96	102	108	114	120	126	132	138							
12½	75	81	87	93	100	106	112	118	125	131	137	143	150						
13	78	84	91	96	104	110	117	123	130	136	143	149	156	162	169				
13½	81	87	94	101	108	114	121	128	135	141	148	155	162	168	175	182			
14	84	91	98	105	112	119	126	133	140	147	154	161	168	175	182	189	196		
14½	87	94	101	108	116	123	130	137	145	152	159	166	174	181	188	195	203		
15	90	97	105	112	120	127	135	142	150	157	165	172	180	187	195	202	210	217	225
15½	93	101	108	116	124	131	139	147	155	162	170	178	186	193	201	209	217	224	232
16	96	104	112	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240
16½	99	107	115	123	132	140	148	157	165	173	181	189	198	206	214	222	231	239	247
17	102	110	119	127	136	144	153	161	170	178	187	195	204	212	221	229	238	246	255
17½	105	114	122	131	140	149	157	166	175	183	192	201	210	218	227	236	245	253	262
18	108	117	126	135	144	153	162	171	180	189	198	207	216	225	234	243	252	261	270
18½	111	120	129	138	148	157	166	176	185	194	203	212	222	231	240	249	259	268	277
19	114	123	133	142	152	161	171	180	190	199	209	218	228	237	247	256	266	275	285
19½	117	127	136	146	156	165	175	185	195	204	214	224	234	243	253	263	273	282	292
20	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
21	126	136	147	157	168	178	189	199	210	220	231	241	252	262	273	283	294	304	315
22	132	143	154	165	176	187	198	209	220	231	242	253	264	275	286	297	308	319	330
23	138	149	161	172	184	195	207	218	230	241	253	264	276	287	299	310	322	333	345
24	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360
25	150	162	175	187	200	212	225	237	250	262	275	287	300	312	325	337	350	362	375
26	156	169	182	195	208	221	234	247	260	273	286	299	312	325	338	351	364	377	390
27	162	175	189	202	216	229	243	256	270	283	297	310	324	337	351	364	378	391	405
28	168	182	196	210	224	238	252	266	280	294	308	322	336	350	364	378	392	406	420
29	174	188	203	217	232	246	261	275	290	304	319	333	348	362	377	391	406	420	435
30	180	195	210	225	240	255	270	285	300	315	330	345	360	375	390	405	420	435	450
31	186	201	217	232	248	263	279	294	310	325	341	356	372	387	403	418	434	449	465
32	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480
33	198	214	231	247	264	280	297	313	330	346	363	379	396	412	429	445	462	478	495
34	204	221	238	255	272	289	306	323	340	357	374	391	408	425	442	459	476	493	510
35	210	227	245	262	280	297	315	333	350	367	385	402	420	437	455	472	490	507	525
36	216	234	252	270	288	306	324	342	360	378	396	414	432	450	468	486	504	522	540
37	222	240	259	277	296	314	333	351	370	388	407	425	444	462	481	499	518	536	555
38	228	247	266	285	304	323	342	361	380	399	418	437	456	475	494	513	532	551	570
39	234	253	273	292	312	331	351	370	390	409	429	448	468	487	507	526	546	565	585
40	240	260	280	300	320	340	360	380	400	420	440	460	480	500	520	540	560	580	600
41	246	266	287	307	328	348	369	389	410	430	451	471	492	512	533	553	574	594	615
42	252	273	294	315	336	357	378	399	420	441	462	483	504	525	546	567	588	609	630
43	258	279	301	322	344	365	387	408	430	451	473	494	516	537	559	580	602	623	645
44	264	286	308	330	352	374	396	418	440	462	484	506	528	550	572	594	616	638	660
45	270	292	315	337	360	382	405	427	450	472	495	517	540	562	585	607	630	652	675
46	276	299	322	345	368	391	414	437	460	483	506	529	552	575	598	621	644	667	690
47	282	305	329	352	376	399	423	446	470	493	517	540	564	587	611	634	658	681	705
48	288	312	336	360	384	408	432	456	480	504	528	552	576	600	624	648	672	696	720
49	294	318	343	367	392	416	441	465	490	514	539	563	588	612	637	661	686	710	735
50	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750
51	306	331	357	382	408	433	459	484	510	535	561	586	612	637	663	688	714	739	765
52	312	338	364	390	416	442	468	494	520	546	572	598	624	650	676	702	728	754	780
53	318	344	371	397	424	450	477	503	530	556	583	609	636	662	689	715	742	768	795
54	324	351	378	405	432	459	486	513	540	567	594	621	648	675	702	729	756	783	810
55	330	357	385	412	440	467	495	522	550	577	605	632	660	687	715	742	770	797	825
56	336	364	392	420	448	476	504	532	560	588	616	644	672	700	728	756	784	812	840
57	342	370	399	427	456	484	513	541	570	598	627	655	684	712	741	769	798	826	855
58	348	377	406	435	464	493	522	551	580	609	638	667	696	725	754	783	812	841	870
59	354	383	413	442	472	501	531	560	590	619	649	678	708	737	767	796	826	855	885
60	360	390	420	450	480	510	540	570	600	630	660	690	720	750	780	810	840	870	900
61	366	397	427	457	488	518	549	579	610	640	671	701	732	762	793	823	854	884	915
62	372	403	434	465	496	527	558	589	620	651	682	713	744	775	806	837	868	899	930
63	378	409	441	472	504	535	567	598	630	661	693	724	756	787	819	850	882	913	945
64	384	415	448	480	512	544	576	608	640	672	704	736	768	800	832	864	896	928	960
65	390	422	455	487	520	552	585	617	650	682	715	747	780	812	845	877	910	942	975

SURFACE FROM 6X10 FT. TO 25X65 FT.

PAGES 62 AND 63.

	15½	16	16½	17	17½	18	18½	19	19½	20	20½	21	21½	22	22½	23	23½	24	24½	25
15½	240																			
16	248	256																		
16½	255	264	272																	
17	263	272	280																	
17½	271	280	288	297																
18	279	288	297	306	315	324														
18½	286	296	305	314	323	333	342													
19	294	304	313	323	332	342	351													
19½	302	312	321	331	341	351	360	370	380	390										
20	310	320	330	340	350	360	370	380	390	400										
21	325	336	346	357	367	378	388	399	409	420	430	441								
22	341	352	363	374	385	396	407	418	429	440	451	462	471	484						
23	356	368	379	391	402	414	425	437	448	460	471	483	495	506	517	529				
24	372	384	396	408	420	432	444	456	468	480	482	504	516	528	540	552	564	576		
25	387	400	412	425	437	450	462	475	487	500	512	525	533	550	563	575	587	600	613	625
26	403	416	429	442	455	468	481	494	507	520	533	546	559	572	585	598	611	624	637	650
27	418	432	445	459	472	486	499	513	526	540	553	567	580	594	607	621	634	648	661	675
28	434	448	462	476	490	504	518	532	546	560	574	588	602	616	630	644	658	672	686	700
29	449	464	478	493	507	522	536	551	565	580	594	609	623	638	652	667	681	696	710	725
30	465	480	495	510	525	540	555	570	585	600	615	630	645	660	675	690	705	720	735	750
31	480	496	511	527	542	558	573	589	604	620	635	651	667	682	698	713	729	744	760	775
32	496	512	528	544	560	576	592	608	624	640	656	672	688	704	720	736	752	768	784	800
33	511	528	544	561	577	594	610	627	643	660	676	693	709	726	742	759	775	792	808	825
34	527	544	561	578	595	612	629	646	663	680	697	714	731	748	765	782	799	816	833	850
35	542	560	577	595	612	630	647	665	682	700	717	735	752	770	787	805	822	840	857	875
36	558	576	594	612	630	648	666	684	702	720	738	756	774	792	810	828	846	864	882	900
37	573	592	610	629	647	666	684	703	721	740	758	777	795	814	832	851	869	880	898	925
38	589	608	627	646	665	684	703	722	741	760	779	798	817	836	855	874	893	912	931	950
39	604	624	643	663	682	702	721	741	760	780	799	819	839	858	878	897	917	936	956	975
40	620	640	660	680	700	720	740	760	780	800	820	840	860	880	900	920	940	960	980	1000
41	635	656	676	697	717	738	758	779	799	820	840	861	882	902	923	944	964	985	1004	1025
42	651	672	693	714	735	756	777	798	819	840	860	881	903	924	945	966	987	1008	1029	1050
43	666	688	709	731	752	774	795	817	838	860	881	903	924	946	967	989	1010	1032	1053	1075
44	682	704	726	748	770	792	814	836	858	880	901	924	946	968	990	1012	1034	1056	1078	1100
45	697	720	742	765	787	810	832	855	877	900	922	945	967	990	1012	1035	1057	1080	1102	1125
46	713	736	759	782	805	828	851	874	897	920	942	966	989	1012	1035	1058	1081	1104	1137	1150
47	728	752	775	799	822	846	869	893	916	940	963	987	1010	1034	1057	1081	1104	1128	1151	1175
48	744	768	792	816	840	864	888	912	936	960	983	1008	1032	1056	1080	1104	1128	1152	1176	1200
49	759	784	808	833	857	882	906	931	955	980	1004	1029	1053	1078	1102	1127	1151	1176	1200	1225
50	775	800	825	850	875	900	925	950	975	1000	1025	1050	1075	1100	1125	1150	1175	1200	1225	1250
51	790	816	841	867	892	918	943	969	994	1020	1046	1071	1096	1122	1147	1173	1198	1224	1250	1275
52	806	832	858	884	910	936	962	988	1014	1040	1066	1092	1118	1144	1170	1196	1222	1248	1274	1300
53	821	848	874	901	927	954	980	1007	1033	1060	1086	1113	1139	1166	1192	1219	1255	1272	1298	1325
54	837	864	891	918	945	972	999	1026	1053	1080	1107	1134	1161	1188	1215	1242	1269	1296	1323	1350
55	852	880	907	935	962	990	1017	1045	1072	1100	1127	1155	1182	1210	1237	1265	1292	1320	1347	1375
56	868	896	924	952	980	1008	1036	1064	1092	1120	1148	1176	1202	1232	1260	1288	1316	1344	1372	1400
57	883	912	940	969	997	1026	1054	1083	1111	1140	1168	1197	1225	1254	1282	1311	1339	1368	1396	1425
58	899	928	957	986	1015	1044	1073	1102	1131	1160	1189	1218	1247	1276	1315	1334	1363	1392	1421	1450
59	914	944	973	1003	1032	1062	1091	1121	1150	1180	1209	1238	1268	1298	1327	1357	1386	1416	1445	1475
60	930	960	990	1020	1050	1080	1110	1140	1170	1200	1230	1260	1290	1320	1350	1380	1420	1440	1470	1500
61	945	976	1006	1037	1067	1098	1128	1159	1189	1220	1250	1281	1311	1342	1372	1403	1433	1464	1494	1525
62	961	992	1023	1054	1085	1116	1147	1178	1209	1240	1271	1302	1333	1364	1395	1426	1457	1488	1519	1550
63	976	1008	1039	1071	1102	1134	1165	1197	1228	1260	1291	1323	1354	1386	1417	1449	1480	1512	1553	1575
64	992	1024	1056	1088	1120	1152	1184	1216	1248	1280	1312	1344	1376	1408	1440	1472	1504	1536	1568	1600
65	1007	1040	1072	1105	1137	1170	1202	1235	1267	1300	1333	1365	1397	1430	1462	1495	1527	1550	1582	1625

SQUARE FEET OF CLASS OR WALL

	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½	13	13½	14	14½	15	15½
56	336	364	392	420	448	476	504	532	560	588	616	644	672	700	728	756	784	812	840	868
57	342	371	399	428	456	485	513	542	570	599	627	656	684	713	741	770	798	827	855	884
58	348	377	406	435	464	493	522	551	580	609	638	667	696	725	754	783	812	841	870	899
59	354	384	413	443	472	502	531	561	590	620	649	679	708	738	767	797	826	856	885	915
60	360	390	420	450	480	510	540	570	600	630	660	690	720	750	780	810	840	870	900	930
61	366	397	427	458	488	519	549	580	610	641	671	702	732	763	793	824	854	885	915	946
62	372	403	434	465	496	527	558	589	620	651	682	713	744	775	806	837	868	899	930	961
63	378	410	441	473	504	536	567	599	630	662	693	725	756	788	819	851	882	914	945	977
64	384	416	448	480	512	544	576	608	640	672	704	736	768	800	832	864	896	928	960	992
65	390	423	455	488	520	553	585	618	650	683	715	748	780	813	845	878	910	943	975	1008
66	396	429	462	495	528	561	594	627	660	693	726	759	792	825	858	891	924	957	990	1023
67	402	436	469	503	536	570	603	637	670	704	737	771	804	838	871	905	938	972	1005	1039
68	408	442	476	510	544	578	612	646	680	714	748	782	816	850	884	918	952	986	1020	1054
69	414	449	483	518	552	587	621	656	690	725	759	794	828	863	897	932	966	1001	1035	1070
70	420	455	490	525	560	595	630	665	700	735	770	805	840	875	910	945	980	1015	1050	1085
71	426	462	497	533	568	604	639	675	710	746	781	817	852	888	923	959	994	1030	1065	1101
72	432	468	504	540	576	612	648	684	720	756	792	828	864	900	936	972	1008	1044	1080	1116
73	438	475	511	548	584	621	657	694	730	767	803	840	876	913	949	986	1022	1059	1095	1132
74	444	481	518	555	592	629	666	703	740	777	814	851	888	925	962	999	1036	1073	1110	1147
75	450	488	525	563	600	638	675	713	750	788	825	863	900	938	975	1013	1050	1088	1125	1163
76	456	494	532	570	608	646	684	722	760	798	836	874	912	950	988	1026	1064	1102	1140	1178
77	462	501	539	578	616	655	693	732	770	809	847	886	924	963	1001	1040	1078	1117	1155	1194
78	468	507	546	585	624	663	702	741	780	819	858	897	936	975	1014	1053	1092	1131	1170	1209
79	474	514	553	593	632	672	711	751	790	830	869	909	948	988	1027	1067	1106	1146	1185	1225
80	480	520	560	600	640	680	720	760	800	840	880	920	960	1000	1040	1080	1120	1160	1200	1240
81	486	527	567	608	648	689	729	770	810	851	891	932	972	1013	1053	1094	1134	1175	1215	1256
82	492	533	574	615	656	697	738	779	820	861	902	943	984	1025	1066	1107	1148	1189	1230	1271
83	498	540	581	623	664	706	747	789	830	872	913	955	996	1038	1079	1121	1162	1204	1245	1287
84	504	546	588	630	672	714	756	798	840	882	924	966	1008	1050	1092	1134	1176	1218	1260	1302
85	510	553	595	638	680	723	765	808	850	893	935	978	1020	1063	1105	1148	1190	1233	1275	1318
86	516	559	602	645	688	731	774	817	860	903	946	989	1032	1075	1118	1161	1204	1247	1290	1333
87	522	566	609	653	696	740	783	827	870	914	957	1001	1044	1088	1131	1175	1218	1262	1305	1349
88	528	572	616	660	704	748	792	836	880	924	968	1012	1056	1100	1144	1188	1232	1276	1320	1364
89	534	579	623	668	712	757	801	846	890	935	979	1024	1068	1113	1157	1202	1246	1291	1335	1380
90	540	585	630	675	720	765	810	855	900	945	990	1035	1080	1125	1170	1215	1260	1305	1350	1395
91	546	592	637	683	728	774	819	865	910	956	1001	1047	1092	1138	1183	1229	1274	1320	1365	1411
92	552	598	644	690	736	782	828	874	920	966	1012	1058	1104	1150	1196	1242	1288	1334	1380	1426
93	558	605	651	698	744	791	837	884	930	977	1023	1070	1116	1163	1209	1256	1302	1349	1395	1442
94	564	611	658	705	752	799	846	893	940	987	1034	1081	1128	1175	1222	1269	1316	1363	1410	1457
95	570	618	665	713	760	808	855	903	950	998	1045	1093	1140	1188	1235	1283	1330	1378	1425	1473
96	576	624	672	720	768	816	864	912	960	1008	1056	1104	1152	1200	1248	1296	1344	1392	1440	1488
97	582	631	679	728	776	825	873	922	970	1019	1067	1116	1164	1213	1261	1310	1358	1407	1455	1504
98	588	637	686	735	784	833	882	931	980	1029	1078	1127	1176	1225	1274	1323	1372	1421	1470	1519
99	594	644	693	743	792	842	891	941	990	1040	1089	1139	1188	1238	1287	1337	1386	1436	1485	1535
100	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
105	630	683	735	788	840	893	945	998	1050	1103	1155	1208	1260	1313	1365	1418	1470	1523	1575	1628
110	660	715	770	825	880	935	990	1045	1100	1155	1210	1265	1320	1375	1430	1485	1540	1595	1650	1705
115	690	748	805	863	920	978	1035	1093	1150	1208	1265	1323	1380	1438	1495	1553	1610	1668	1725	1783
120	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860
125	750	813	875	938	1000	1063	1125	1188	1250	1313	1375	1438	1500	1563	1625	1688	1750	1813	1875	1938
130	780	845	910	975	1040	1105	1170	1235	1300	1365	1430	1495	1560	1625	1690	1755	1820	1885	1950	2015
135	810	878	945	1013	1080	1148	1215	1283	1350	1418	1485	1553	1620	1688	1755	1823	1890	1958	2025	2093
140	840	910	980	1050	1120	1190	1260	1330	1400	1470	1540	1610	1680	1750	1820	1890	1960	2030	2100	2170
145	870	943	1015	1088	1160	1233	1305	1378	1450	1523	1595	1668	1740	1813	1885	1958	2030	2103	2175	2248
150	900	975	1050	1125	1200	1275	1350	1425	1500	1575	1650	1725	1800	1875	1950	2025	2100	2175	2250	2325
155	930	1008	1085	1163	1240	1318	1395	1473	1550	1628	1705	1783	1860	1938	2015	2093	2170	2248	2325	2403
160	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000	2080	2160	2240	2320	2400	2480
165	990	1073	1155	1238	1320	1403	1485	1568	1650	1733	1815	1898	1980	2063	2145	2228	2310	2393	2475	2558
170	1020	1105	1190	1275	1360	1445	1530	1615	1700	1785	1870	1955	2040	2125	2210	2295	2380	2465	2550	2635
175	1050	1138	1225	1313	1400	1488	1575	1663	1750	1838	1925	2013	2100	2188	2275	2363	2450	2538	2625	2713
180	1080	1170	1260	1350	1440	1530	1620	1710	1800	1890	1980	2070	2160	2250	2340	2430	2520	2610	2700	2790
185	1110	1203	1295	1388	1480	1573	1665	1758	1850	1943	2035	2128	2220	2313	2405	2498	2590	2683	2775	2868
190	1140	1235	1330	1425	1520	1615	1710	1805	1900	1995	2090	2185	2280	2375	2470	2565	2660	2755	2850	2945
195	1170	1268	1365	1463	1560	1658	1755	1853	1950	2048	2145	2243	2340	2438	2535	2633	2730	2828	2925	3023
200	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100

SURFACE 6X56 FEET AND LARGER.

	16	16½	17	17½	18	18½	19	19½	20	20½	21	22	23	24	25	26	27	28	29	30
56	896	924	952	980	1008	1036	1064	1092	1120	1148	1176	1232	1288	1344	1400	1456	1512	1568	1624	1680
57	912	941	969	998	1026	1055	1083	1112	1140	1169	1197	1254	1311	1368	1425	1482	1539	1596	1653	1710
58	928	957	986	1015	1044	1073	1102	1131	1160	1189	1218	1276	1334	1392	1450	1508	1566	1624	1682	1740
59	944	974	1003	1033	1062	1092	1121	1151	1180	1210	1239	1298	1357	1416	1475	1534	1593	1652	1711	1770
60	960	990	1020	1050	1080	1110	1140	1170	1200	1230	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800
61	976	1007	1037	1068	1098	1129	1159	1190	1220	1251	1281	1342	1403	1464	1525	1586	1647	1708	1769	1830
62	992	1023	1054	1085	1116	1147	1178	1209	1240	1271	1302	1364	1426	1488	1550	1612	1674	1736	1798	1860
63	1008	1040	1071	1103	1134	1166	1197	1229	1260	1292	1323	1386	1449	1512	1575	1638	1701	1764	1827	1890
64	1024	1056	1088	1120	1152	1184	1216	1248	1280	1312	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920
65	1040	1073	1105	1138	1170	1203	1235	1268	1300	1333	1365	1430	1495	1560	1625	1690	1755	1820	1885	1950
66	1056	1089	1122	1155	1188	1221	1254	1287	1320	1353	1386	1452	1518	1584	1650	1716	1782	1848	1914	1980
67	1072	1106	1139	1173	1206	1240	1273	1307	1340	1374	1407	1474	1541	1608	1675	1742	1809	1876	1943	2010
68	1088	1122	1156	1190	1224	1258	1292	1326	1360	1394	1428	1496	1564	1632	1700	1768	1836	1904	1972	2040
69	1104	1139	1173	1208	1242	1277	1311	1346	1380	1415	1449	1518	1587	1656	1725	1794	1863	1932	2001	2070
70	1120	1155	1190	1225	1260	1295	1330	1365	1400	1435	1470	1540	1610	1680	1750	1820	1890	1960	2030	2100
71	1136	1172	1207	1243	1278	1314	1349	1385	1420	1456	1491	1562	1633	1704	1775	1846	1917	1988	2059	2130
72	1152	1188	1224	1260	1296	1332	1368	1404	1440	1476	1512	1584	1656	1728	1800	1872	1944	2016	2088	2160
73	1168	1205	1241	1278	1314	1351	1387	1424	1460	1497	1533	1606	1679	1752	1825	1898	1971	2044	2117	2190
74	1184	1221	1258	1295	1332	1369	1406	1443	1480	1517	1554	1628	1702	1776	1850	1924	1998	2072	2146	2220
75	1200	1238	1275	1313	1350	1388	1425	1463	1500	1538	1575	1650	1725	1800	1875	1950	2025	2100	2175	2250
76	1216	1254	1292	1330	1368	1406	1444	1482	1520	1558	1596	1672	1748	1824	1900	1976	2052	2128	2204	2280
77	1232	1271	1309	1348	1386	1425	1463	1502	1540	1579	1617	1694	1771	1848	1925	2002	2079	2156	2233	2310
78	1248	1287	1326	1365	1404	1443	1482	1521	1560	1599	1638	1716	1794	1872	1950	2028	2106	2184	2262	2340
79	1264	1304	1343	1383	1422	1462	1501	1541	1580	1620	1659	1738	1817	1896	1975	2054	2133	2212	2291	2370
80	1280	1320	1360	1400	1440	1480	1520	1560	1600	1640	1680	1760	1840	1920	2000	2080	2160	2240	2320	2400
81	1296	1337	1377	1418	1458	1499	1539	1580	1620	1661	1701	1782	1863	1944	2025	2106	2187	2268	2349	2430
82	1312	1353	1394	1435	1476	1517	1558	1599	1640	1681	1722	1804	1886	1968	2050	2132	2214	2296	2378	2460
83	1328	1370	1411	1453	1494	1536	1577	1619	1660	1702	1743	1826	1909	1992	2075	2158	2241	2324	2407	2490
84	1344	1386	1428	1470	1512	1554	1596	1638	1680	1722	1764	1848	1932	2016	2100	2184	2268	2352	2436	2520
85	1360	1403	1445	1488	1530	1573	1615	1658	1700	1743	1785	1870	1955	2040	2125	2210	2295	2380	2465	2550
86	1376	1419	1462	1505	1548	1591	1634	1677	1720	1763	1806	1892	1978	2064	2150	2236	2322	2408	2494	2580
87	1392	1436	1479	1523	1566	1610	1653	1697	1740	1784	1827	1914	2001	2088	2175	2262	2349	2436	2523	2610
88	1408	1452	1496	1540	1584	1628	1672	1716	1760	1804	1848	1936	2024	2112	2200	2288	2376	2464	2552	2640
89	1424	1469	1513	1558	1602	1647	1691	1736	1780	1825	1869	1958	2047	2136	2225	2313	2403	2492	2581	2670
90	1440	1485	1530	1575	1620	1665	1710	1755	1800	1845	1890	1980	2070	2160	2250	2340	2430	2520	2610	2700
91	1456	1502	1547	1593	1638	1684	1729	1775	1820	1866	1911	2002	2093	2184	2275	2366	2457	2548	2639	2730
92	1472	1518	1564	1610	1656	1702	1748	1794	1840	1886	1932	2024	2116	2208	2300	2392	2484	2576	2668	2760
93	1488	1535	1581	1628	1674	1721	1767	1814	1860	1907	1953	2046	2139	2232	2325	2418	2511	2604	2697	2790
94	1504	1551	1598	1645	1692	1739	1786	1833	1880	1927	1974	2068	2162	2256	2350	2444	2538	2632	2726	2820
95	1520	1568	1615	1663	1710	1758	1805	1853	1900	1948	1995	2090	2185	2280	2375	2470	2565	2660	2755	2850
96	1536	1584	1632	1680	1728	1776	1824	1872	1920	1968	2016	2112	2208	2304	2400	2496	2592	2688	2784	2880
97	1552	1601	1649	1698	1746	1795	1843	1892	1940	1989	2037	2134	2231	2328	2425	2522	2619	2716	2813	2910
98	1568	1617	1666	1715	1764	1813	1862	1911	1960	2009	2058	2156	2254	2352	2450	2548	2646	2744	2842	2940
99	1584	1634	1683	1733	1782	1832	1881	1931	1980	2030	2079	2178	2277	2376	2475	2574	2673	2772	2871	2970
100	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000
105	1680	1733	1785	1838	1890	1943	1995	2048	2100	2153	2205	2310	2415	2520	2625	2730	2835	2940	3045	3150
110	1760	1815	1870	1925	1980	2035	2090	2145	2200	2255	2310	2420	2530	2640	2750	2860	2970	3080	3190	3300
115	1840	1898	1955	2013	2070	2128	2185	2243	2300	2358	2415	2530	2645	2760	2875	2990	3105	3220	3335	3450
120	1920	1980	2040	2100	2160	2220	2280	2340	2400	2460	2520	2640	2760	2880	3000	3120	3240	3360	3480	3600
125	2000	2063	2125	2188	2250	2313	2375	2438	2500	2563	2625	2750	2875	3000	3125	3250	3375	3500	3625	3750
130	2080	2145	2210	2275	2340	2405	2470	2535	2600	2665	2730	2860	2990	3120	3250	3380	3510	3640	3770	3900
135	2160	2228	2295	2363	2430	2498	2565	2633	2700	2768	2835	2970	3105	3240	3375	3510	3645	3780	3915	4050
140	2240	2310	2380	2450	2520	2590	2660	2730	2800	2870	2940	3080	3220	3360	3500	3640	3780	3920	4060	4200
145	2320	2393	2465	2538	2610	2683	2755	2828	2900	2973	3045	3190	3335	3480	3625	3770	3915	4060	4205	4350
150	2400	2475	2550	2625	2700	2775	2850	2925	3000	3075	3150	3300	3450	3600	3750	3900	4050	4200	4350	4500
155	2480	2558	2635	2713	2790	2868	2945	3023	3100	3178	3255	3410	3565	3720	3875	4030	4185	4340	4495	4650
160	2560	2640	2720	2800	2880	2960	3040	3120	3200	3280	3360	3520	3680	3840	4000	4160	4320	4480	4640	4800
165	2640	2723	2805	2888	2970	3053	3135	3218	3300	3383	3465	3630	3795	3960	4125	4290	4455	4620	4785	4950
170	2720	2805	2890	2975	3060	3145	3230	3315	3400	3485	3570	3740	3910	4080	4250	4420	4590	4760	4930	5100
175	2800	2888	2975	3063	3150	3238	3325	3413	3500	3588	3675	3850	4025	4200	4375	4550	4725	4900	5075	5250
180	2880	2970	3060	3150	3240	3330	3420	3510	3600	3690	3780	3960	4140	4320	4500	4680	4860	5040	5220	5400
185	2960	3053	3145	3238	3330	3423	3515	3608	3700	3793	3885	4070	4255	4440	4625	4810	4995	5180	5365	5550
190	3040	3135	3230	3325	3420	3515	3610	3705	3800	3895	3990	4180	4370	4560	4750	4940	5130	5320	5510	5

COST OR SELLING PRICE OF RADIATORS

CENTS PER FOOT

Am't.	17½	18	18¼	18½	18¾	19	19¼	19½	19¾	20	20¼	20½	20¾	21
1	18	18	18	19	19	19	19	20	20	20	20	21	21	21
2	35	36	37	37	38	38	39	39	40	40	41	41	42	42
3	53	54	55	56	56	57	58	59	59	60	61	62	62	63
4	70	72	73	74	75	76	77	78	79	80	81	82	83	84
5	88	90	91	93	94	95	96	98	99	1 00	1 01	1 03	1 04	1 05
6	1 05	1 08	1 09	1 11	1 13	1 14	1 16	1 17	1 19	1 20	1 22	1 23	1 25	1 26
7	1 23	1 26	1 27	1 30	1 31	1 33	1 35	1 37	1 38	1 40	1 42	1 44	1 45	1 47
8	1 40	1 44	1 46	1 48	1 50	1 52	1 54	1 56	1 58	1 60	1 62	1 64	1 66	1 68
9	1 58	1 62	1 64	1 67	1 69	1 71	1 73	1 76	1 78	1 80	1 82	1 85	1 87	1 89
10	1 75	1 80	1 84	1 85	1 88	1 90	1 93	1 95	1 98	2 00	2 03	2 05	2 08	2 10
11	1 93	1 98	2 00	2 04	2 06	2 09	2 12	2 15	2 17	2 20	2 23	2 26	2 28	2 31
12	2 10	2 16	2 19	2 22	2 25	2 28	2 31	2 34	2 37	2 40	2 43	2 46	2 49	2 52
13	2 28	2 34	2 37	2 41	2 44	2 47	2 50	2 54	2 57	2 60	2 63	2 67	2 70	2 73
14	2 45	2 52	2 55	2 59	2 63	2 66	2 70	2 73	2 77	2 80	2 84	2 87	2 91	2 94
15	2 63	2 70	2 73	2 78	2 81	2 85	2 89	2 93	2 96	3 00	3 04	3 08	3 11	3 15
16	2 80	2 88	2 91	2 96	3 00	3 04	3 08	3 12	3 16	3 20	3 24	3 28	3 32	3 36
17	2 98	3 06	3 10	3 15	3 19	3 23	3 27	3 32	3 36	3 40	3 44	3 49	3 53	3 57
18	3 15	3 24	3 29	3 33	3 38	3 42	3 47	3 51	3 56	3 60	3 65	3 69	3 74	3 78
19	3 33	3 42	3 47	3 52	3 56	3 61	3 66	3 71	3 75	3 80	3 85	3 90	3 94	3 99
20	3 50	3 60	3 65	3 70	3 75	3 80	3 85	3 90	3 95	4 00	4 05	4 10	4 15	4 20
21	3 68	3 78	3 83	3 89	3 94	3 99	4 04	4 10	4 15	4 20	4 25	4 31	4 36	4 41
22	3 85	3 96	4 02	4 07	4 13	4 18	4 24	4 29	4 35	4 40	4 46	4 51	4 57	4 62
23	4 03	4 14	4 21	4 26	4 31	4 37	4 43	4 49	4 54	4 60	4 66	4 72	4 77	4 83
24	4 20	4 32	4 39	4 44	4 50	4 56	4 62	4 68	4 74	4 80	4 86	4 92	4 98	5 04
25	4 38	4 50	4 57	4 63	4 69	4 75	4 81	4 88	4 94	5 00	5 06	5 13	5 19	5 25
26	4 55	4 68	4 75	4 81	4 88	4 94	5 01	5 07	5 14	5 20	5 27	5 33	5 40	5 46
27	4 73	4 86	4 93	5 00	5 06	5 13	5 20	5 27	5 33	5 40	5 47	5 54	5 60	5 67
28	4 90	5 04	5 11	5 18	5 25	5 32	5 39	5 46	5 53	5 60	5 67	5 74	5 81	5 88
29	5 08	5 22	5 29	5 37	5 44	5 51	5 58	5 66	5 73	5 80	5 87	5 95	6 02	6 09
30	5 25	5 40	5 48	5 55	5 63	5 70	5 78	5 85	5 93	6 00	6 08	6 15	6 23	6 30
31	5 43	5 58	5 66	5 74	5 81	5 89	5 97	6 05	6 12	6 20	6 28	6 36	6 43	6 51
32	5 60	5 76	5 84	5 92	6 00	6 08	6 16	6 24	6 32	6 40	6 48	6 56	6 64	6 72
33	5 78	5 94	6 02	6 11	6 19	6 27	6 35	6 44	6 52	6 60	6 68	6 77	6 85	6 93
34	5 95	6 12	6 21	6 29	6 38	6 46	6 55	6 63	6 72	6 80	6 89	6 97	7 06	7 14
35	6 13	6 30	6 39	6 48	6 56	6 65	6 74	6 83	6 91	7 00	7 09	7 18	7 26	7 35
36	6 30	6 58	6 57	6 66	6 75	6 84	6 93	7 02	7 11	7 20	7 29	7 38	7 47	7 56
37	6 48	6 66	6 75	6 85	6 94	7 03	7 12	7 22	7 31	7 40	7 49	7 59	7 68	7 77
38	6 65	6 84	6 94	7 03	7 13	7 23	7 32	7 41	7 51	7 60	7 70	7 79	7 89	7 98
39	6 83	7 02	7 12	7 22	7 31	7 41	7 51	7 61	7 70	7 80	7 90	8 00	8 09	8 19
40	7 00	7 20	7 30	7 40	7 50	7 60	7 70	7 80	7 90	8 00	8 10	8 20	8 30	8 40
41	7 18	7 38	7 48	7 59	7 69	7 79	7 89	8 00	8 10	8 20	8 30	8 41	8 51	8 61
42	7 35	7 56	7 67	7 77	7 88	7 98	8 09	8 19	8 30	8 40	8 51	8 61	8 72	8 82
43	7 53	7 74	7 85	7 96	8 06	8 17	8 28	8 39	8 49	8 60	8 71	8 82	8 92	9 03
44	7 70	7 92	8 03	8 14	8 25	8 36	8 47	8 58	8 69	8 80	8 91	9 02	9 13	9 24
45	7 88	8 10	8 21	8 33	8 44	8 55	8 66	8 78	8 89	9 00	9 11	9 23	9 34	9 45
46	8 05	8 28	8 40	8 51	8 63	8 74	8 86	8 97	9 09	9 20	9 32	9 43	9 55	9 66
47	8 23	8 46	8 58	8 70	8 81	8 93	9 05	9 17	9 28	9 40	9 52	9 64	9 75	9 87
48	8 40	8 64	8 76	8 88	9 00	9 12	9 24	9 36	9 48	9 60	9 72	9 84	9 96	10 08
49	8 58	8 82	8 94	9 07	9 19	9 31	9 43	9 56	9 68	9 80	9 92	10 05	10 17	10 29
50	8 75	9 00	9 13	9 25	9 38	9 50	9 63	9 75	9 88	10 00	10 13	10 25	10 38	10 50
51	8 93	9 18	9 30	9 44	9 56	9 69	9 82	9 95	10 07	10 20	10 33	10 46	10 58	10 71
52	9 10	9 36	9 49	9 62	9 75	9 88	10 01	10 14	10 27	10 40	10 53	10 66	10 79	10 92
53	9 28	9 54	9 67	9 81	9 94	10 07	10 20	10 34	10 47	10 60	10 73	10 87	11 00	11 13
54	9 45	9 72	9 86	9 99	10 13	10 26	10 40	10 53	10 67	10 80	10 94	11 07	11 21	11 34
55	9 63	9 90	10 04	10 18	10 31	10 45	10 59	10 73	10 86	11 00	11 14	11 28	11 41	11 55
56	9 80	10 08	10 22	10 36	10 50	10 64	10 78	10 92	11 06	11 20	11 34	11 48	11 62	11 76
57	9 98	10 26	10 40	10 55	10 69	10 83	10 97	11 12	11 26	11 40	11 54	11 69	11 83	11 97
58	10 15	10 44	10 59	10 73	10 88	11 02	11 17	11 31	11 46	11 60	11 75	11 89	12 04	12 18
59	10 33	10 62	10 77	10 92	11 06	11 21	11 36	11 51	11 65	11 80	11 95	12 10	12 24	12 39
60	10 50	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	12 00	12 15	12 30	12 45	12 60
61	10 68	10 98	11 13	11 29	11 44	11 59	11 74	11 90	12 05	12 20	12 35	12 51	12 66	12 81
62	10 85	11 16	11 32	11 47	11 63	11 78	11 94	12 09	12 25	12 40	12 56	12 71	12 87	13 02
63	11 03	11 34	11 50	11 66	11 81	11 97	12 13	12 29	12 44	12 60	12 76	12 92	13 07	13 23
64	11 20	11 52	11 68	11 84	12 00	12 16	12 32	12 48	12 74	12 80	12 96	13 12	13 28	13 44
65	11 38	11 70	11 86	12 03	12 19	12 35	12 51	12 68	12 84	13 00	13 16	13 33	13 49	13 65

FROM 17 1-2 TO 26 CENTS PER SQUARE FOOT.

CENTS PER FOOT.

Am't	21¼	21½	21¾	22	22¼	22½	23	23½	24	24½	25	25½	26
1	21	22	22	22	22	23	23	24	24	25	25	26	26
2	43	43	44	44	45	45	46	47	48	49	50	51	52
3	64	65	65	66	67	68	69	71	72	74	75	77	78
4	85	86	87	88	89	90	92	94	96	98	1 00	1 02	1 04
5	1 06	1 08	1 09	1 10	1 11	1 13	1 15	1 18	1 20	1 23	1 25	1 28	1 30
6	1 28	1 29	1 31	1 32	1 34	1 35	1 38	1 41	1 44	1 47	1 50	1 53	1 56
7	1 49	1 51	1 52	1 54	1 56	1 58	1 61	1 65	1 68	1 72	1 75	1 79	1 82
8	1 70	1 72	1 74	1 76	1 78	1 80	1 84	1 88	1 92	1 96	2 00	2 04	2 08
9	1 91	1 94	1 96	1 98	2 00	2 02	2 07	2 12	2 16	2 21	2 25	2 30	2 34
10	2 13	2 15	2 18	2 20	2 23	2 25	2 30	2 35	2 40	2 45	2 50	2 55	2 60
11	2 34	2 37	2 39	2 42	2 45	2 48	2 53	2 59	2 64	2 70	2 75	2 81	2 86
12	2 55	2 58	2 61	2 64	2 67	2 70	2 76	2 82	2 88	2 94	3 00	3 06	3 12
13	2 76	2 80	2 83	2 86	2 89	2 93	2 99	3 06	3 12	3 19	3 25	3 32	3 38
14	2 98	3 01	3 05	3 08	3 12	3 15	3 22	3 29	3 36	3 43	3 50	3 57	3 64
15	3 19	3 23	3 26	3 30	3 34	3 38	3 45	3 53	3 60	3 68	3 75	3 83	3 90
16	3 40	3 44	3 48	3 52	3 56	3 60	3 68	3 76	3 84	3 92	4 00	4 08	4 16
17	3 61	3 66	3 70	3 74	3 78	3 83	3 91	4 00	4 08	4 17	4 25	4 34	4 42
18	3 83	3 87	3 92	3 96	4 01	4 05	4 14	4 23	4 32	4 41	4 50	4 59	4 68
19	4 04	4 09	4 13	4 18	4 23	4 28	4 37	4 47	4 56	4 66	4 75	4 85	4 94
20	4 25	4 30	4 35	4 40	4 45	4 50	4 60	4 70	4 80	4 90	5 00	5 10	5 20
21	4 46	4 52	4 57	4 62	4 67	4 73	4 83	4 94	5 04	5 15	5 25	5 36	5 46
22	4 67	4 73	4 79	4 84	4 90	4 95	5 06	5 17	5 28	5 39	5 50	5 61	5 72
23	4 89	4 95	5 00	5 06	5 12	5 18	5 29	5 41	5 52	5 64	5 75	5 87	5 98
24	5 10	5 16	5 22	5 28	5 34	5 40	5 52	5 64	5 76	5 88	6 00	6 12	6 24
25	5 31	5 38	5 44	5 50	5 56	5 63	5 75	5 88	6 00	6 13	6 25	6 38	6 50
26	5 52	5 59	5 66	5 72	5 79	5 85	5 98	6 11	6 24	6 37	6 50	6 63	6 76
27	5 74	5 81	5 87	5 94	6 01	6 08	6 21	6 35	6 48	6 62	6 75	6 89	7 02
28	6 95	6 02	6 09	6 16	6 23	6 30	6 44	6 58	6 72	6 86	7 00	7 14	7 28
29	6 16	6 24	6 31	6 38	6 45	6 53	6 67	6 82	6 96	7 11	7 25	7 40	7 54
30	6 37	6 45	6 53	6 60	6 68	6 75	6 90	7 05	7 20	7 35	7 50	7 65	7 80
31	6 59	6 67	6 74	6 82	6 90	6 98	7 13	7 29	7 44	7 60	7 75	7 91	8 06
32	6 80	6 88	6 96	7 04	7 12	7 20	7 36	7 52	7 68	7 84	8 00	8 16	8 32
33	7 01	7 10	7 18	7 26	7 34	7 42	7 59	7 76	7 92	8 09	8 25	8 42	8 58
34	7 22	7 31	7 40	7 48	7 57	7 65	7 82	7 99	8 16	8 33	8 50	8 67	8 84
35	7 44	7 53	7 61	7 70	7 79	7 88	8 05	8 23	8 40	8 58	8 75	8 93	9 10
36	7 65	7 74	7 83	7 92	8 01	8 10	8 28	8 46	8 64	8 82	9 00	9 18	9 36
37	7 86	7 96	8 05	8 14	8 23	8 33	8 51	8 70	8 88	9 07	9 25	9 44	9 62
38	8 07	8 17	8 27	8 36	8 46	8 55	8 74	8 93	9 12	9 31	9 50	9 69	9 88
39	8 20	8 30	8 40	8 50	8 60	8 70	8 90	9 10	9 30	9 50	9 70	9 90	10 10
40	8 50	8 60	8 70	8 80	8 90	9 00	9 20	9 40	9 60	9 80	10 00	10 20	10 40
41	8 71	8 82	8 92	9 02	9 12	9 23	9 43	9 64	9 84	10 05	10 25	10 46	10 66
42	8 92	9 03	9 14	9 24	9 35	9 45	9 66	9 87	10 08	10 29	10 50	10 71	10 92
43	9 13	9 25	9 35	9 46	9 57	9 68	9 89	10 11	10 32	10 54	10 75	10 97	11 18
44	9 35	9 46	9 57	9 68	9 79	9 90	10 12	10 34	10 56	10 78	11 00	11 22	11 44
45	9 46	9 68	9 79	9 90	10 01	10 13	10 35	10 58	10 80	11 3	11 25	11 48	11 70
46	9 77	9 89	10 01	10 12	10 24	10 35	10 58	10 81	11 04	11 27	11 50	11 73	11 96
47	9 98	10 11	10 22	10 34	10 46	10 58	11 01	11 05	11 28	11 52	11 75	11 99	12 22
48	10 20	10 32	10 44	10 56	10 68	10 80	11 04	11 28	11 52	11 76	12 00	12 24	12 48
49	10 41	10 54	10 66	10 78	10 90	11 03	11 27	11 52	11 76	12 01	12 25	12 50	12 74
50	10 62	10 75	10 88	11 00	11 13	11 25	11 50	11 75	12 00	12 25	12 50	12 75	13 00
51	10 83	10 97	11 09	11 22	11 35	11 48	11 73	11 99	12 24	12 50	12 75	13 01	13 26
52	11 04	11 18	11 31	11 44	11 57	11 70	11 96	12 22	12 48	12 74	13 00	13 26	13 52
53	11 26	11 40	11 53	11 66	11 79	11 93	12 19	12 46	12 72	12 99	13 25	13 52	13 78
54	11 48	11 61	11 75	11 88	12 02	12 15	12 42	12 69	12 96	13 23	13 50	13 77	14 04
55	11 69	11 83	11 96	12 10	12 24	12 38	12 65	12 93	13 20	13 48	13 75	14 03	14 30
56	11 90	12 04	12 18	12 32	12 46	12 60	12 88	13 16	13 44	13 72	14 00	14 28	14 56
57	12 11	12 26	12 40	12 54	12 68	12 83	13 11	13 40	13 68	13 97	14 25	14 54	14 82
58	12 33	12 47	12 62	12 76	12 91	13 05	13 34	13 63	13 92	14 21	14 50	14 79	15 08
59	12 54	12 69	12 83	12 98	13 13	13 28	13 57	13 87	14 16	14 46	14 75	15 05	15 34
60	12 75	12 90	13 05	13 20	13 35	13 50	13 80	14 10	14 40	14 70	15 00	15 30	15 60
61	12 96	13 12	13 27	13 42	13 57	13 73	14 03	14 34	14 64	14 95	15 25	15 56	15 86
62	13 18	13 33	13 49	13 64	13 80	13 95	14 26	14 57	14 88	15 19	15 50	15 81	16 12
63	13 39	13 55	13 70	13 86	14 02	14 18	14 49	14 81	15 12	15 44	15 75	16 07	16 38
64	13 60	13 76	13 92	14 08	14 24	14 40	14 72	15 04	15 36	15 68	16 00	16 32	16 64
65	13 81	13 98	14 14	14 30	14 46	14 63	14 95	15 28	15 60	15 93	16 25	16 58	16 90

NOTE—For price or cost of radiators with over 65 sq. ft. see following pages.
For price or cost of radiators from 27 to 50 cents per sq. foot see pages 70 to 73 inclusive.

EXPLANATION: To ascertain the cost of any radiator, look under the desired price and opposite the amount and the sum found will be the cost. If the amount of radiation exceeds 100 feet, add the cost found opposite the tens to the cost found opposite the hundreds to the cost found opposite the tens to the cost found opposite the hundreds.

COST OR SELLING PRICE OF RADIATORS

Amt.	CENTS PER FOOT.														
	17½	18	18½	18¾	18¾	19	19¼	19½	19¾	20	20¼	20½	20¾	21	
66	11.55	11.88	12.05	12.21	12.38	12.54	12.71	12.87	13.04	13.20	13.37	13.53	13.70	13.86	
67	11.73	12.06	12.23	12.40	12.56	12.73	12.90	13.07	13.23	13.40	13.57	13.74	13.90	14.07	
68	11.90	12.24	12.41	12.58	12.75	12.92	13.09	13.26	13.43	13.60	13.77	13.94	14.11	14.28	
69	12.08	12.42	12.59	12.77	12.94	13.11	13.28	13.46	13.63	13.80	13.97	14.15	14.32	14.49	
70	12.25	12.60	12.78	12.95	13.13	13.30	13.48	13.65	13.83	14.00	14.18	14.35	14.53	14.70	
71	12.43	12.78	12.96	13.14	13.31	13.49	13.67	13.85	14.02	14.20	14.38	14.56	14.73	14.91	
72	12.60	12.96	13.14	13.32	13.50	13.68	13.86	14.04	14.22	14.40	14.58	14.76	14.94	15.12	
73	12.78	13.14	13.32	13.51	13.69	13.87	14.05	14.24	14.42	14.60	14.78	14.97	15.15	15.33	
74	12.95	13.32	13.51	13.69	13.88	14.06	14.25	14.43	14.62	14.80	14.99	15.17	15.36	15.54	
75	13.13	13.50	13.69	13.88	14.06	14.25	14.44	14.63	14.81	15.00	15.19	15.38	15.56	15.75	
76	13.30	13.68	13.87	14.06	14.25	14.44	14.63	14.82	15.01	15.20	15.39	15.58	15.77	15.96	
77	13.48	13.86	14.05	14.25	14.44	14.63	14.82	15.02	15.21	15.40	15.59	15.79	15.98	16.17	
78	13.65	14.04	14.24	14.43	14.63	14.82	15.02	15.21	15.41	15.60	15.80	15.99	16.19	16.38	
79	13.83	14.22	14.42	14.62	14.81	15.01	15.21	15.41	15.60	15.80	16.00	16.20	16.39	16.59	
80	14.00	14.40	14.60	14.80	15.00	15.20	15.40	15.60	15.80	16.00	16.20	16.40	16.60	16.80	
81	14.18	14.58	14.78	14.99	15.19	15.39	15.59	15.80	16.00	16.20	16.40	16.61	16.81	17.01	
82	14.35	14.76	14.97	15.17	15.38	15.58	15.79	15.99	16.20	16.40	16.61	16.81	17.02	17.22	
83	14.53	14.94	15.15	15.36	15.56	15.77	15.98	16.19	16.39	16.60	16.81	17.02	17.22	17.43	
84	14.70	15.12	15.33	15.54	15.75	15.96	16.17	16.38	16.59	16.80	17.01	17.22	17.43	17.64	
85	14.88	15.30	15.51	15.73	15.94	16.15	16.36	16.58	16.79	17.00	17.21	17.43	17.64	17.85	
86	15.05	15.48	15.69	15.91	16.13	16.34	16.56	16.77	16.99	17.20	17.42	17.63	17.85	18.06	
87	15.23	15.66	15.88	16.10	16.31	16.53	16.75	16.97	17.18	17.40	17.62	17.84	18.05	18.27	
88	15.40	15.84	16.06	16.28	16.50	16.72	16.94	17.16	17.38	17.60	17.82	18.04	18.26	18.48	
89	15.58	16.02	16.24	16.47	16.69	16.91	17.13	17.36	17.58	17.80	18.02	18.25	18.47	18.69	
90	15.75	16.20	16.43	16.65	16.88	17.10	17.33	17.55	17.78	18.00	18.23	18.45	18.68	18.90	
91	15.93	16.38	16.61	16.84	17.06	17.29	17.52	17.75	17.97	18.20	18.43	18.66	18.88	19.11	
92	16.10	16.56	16.79	17.02	17.25	17.48	17.71	17.94	18.17	18.40	18.63	18.86	19.09	19.32	
93	16.28	16.74	16.97	17.21	17.44	17.67	17.90	18.14	18.37	18.60	18.83	19.07	19.30	19.53	
94	16.45	16.92	17.16	17.39	17.63	17.86	18.10	18.33	18.57	18.80	19.04	19.27	19.51	19.74	
95	16.63	17.10	17.34	17.58	17.81	18.05	18.29	18.53	18.76	19.00	19.24	19.48	19.71	19.95	
96	16.80	17.28	17.52	17.76	18.00	18.24	18.48	18.72	18.96	19.20	19.44	19.68	19.92	20.16	
97	16.98	17.46	17.70	17.95	18.19	18.43	18.67	18.92	19.16	19.40	19.64	19.89	20.13	20.37	
98	17.15	17.64	17.89	18.13	18.38	18.62	18.87	19.11	19.36	19.60	19.85	20.09	20.34	20.58	
99	17.33	17.82	18.07	18.32	18.56	18.81	19.06	19.31	19.55	19.80	20.05	20.30	20.54	20.79	
100	17.50	18.00	18.25	18.50	18.75	19.00	19.25	19.50	19.75	20.00	20.25	20.50	20.75	21.00	
101	17.68	18.18	18.43	18.69	18.94	19.19	19.44	19.70	19.95	20.20	20.45	20.71	20.96	21.21	
102	17.85	18.36	18.62	18.87	19.13	19.38	19.64	19.89	20.15	20.40	20.66	20.91	21.17	21.42	
103	18.03	18.54	18.80	19.06	19.31	19.57	19.83	20.09	20.35	20.60	20.86	21.12	21.38	21.63	
104	18.20	18.72	18.98	19.24	19.50	19.76	20.02	20.28	20.54	20.80	21.06	21.32	21.58	21.84	
105	18.38	18.90	19.16	19.43	19.69	19.95	20.21	20.48	20.74	21.00	21.26	21.53	21.79	22.05	
106	18.55	19.08	19.35	19.61	19.88	20.14	20.41	20.67	20.94	21.20	21.47	21.73	22.00	22.26	
107	18.72	19.26	19.53	19.80	20.06	20.33	20.60	20.87	21.14	21.40	21.67	21.94	22.21	22.47	
108	18.90	19.44	19.71	19.98	20.25	20.52	20.79	21.06	21.33	21.60	21.87	22.14	22.41	22.68	
109	19.07	19.62	19.89	20.17	20.44	20.71	20.98	21.26	21.53	21.80	22.07	22.35	22.62	22.89	
110	19.25	19.80	20.08	20.35	20.63	20.90	21.18	21.45	21.73	22.00	22.28	22.55	22.83	23.10	
111	19.42	19.98	20.26	20.54	20.81	21.09	21.37	21.65	21.93	22.20	22.48	22.76	23.04	23.31	
112	19.60	20.16	20.44	20.72	21.00	21.28	21.56	21.84	22.12	22.40	22.68	22.96	23.24	23.52	
113	19.77	20.34	20.62	20.91	21.19	21.47	21.75	22.04	22.32	22.60	22.88	23.17	23.45	23.73	
114	19.95	20.52	20.81	21.09	21.38	21.66	21.95	22.23	22.52	22.80	23.09	23.37	23.66	23.94	
115	20.12	20.70	20.99	21.28	21.56	21.85	22.14	22.43	22.72	23.00	23.29	23.58	23.87	24.15	
116	20.30	20.88	21.17	21.46	21.75	22.04	22.33	22.62	22.91	23.20	23.49	23.78	24.07	24.36	
117	20.47	21.06	21.35	21.65	21.94	22.23	22.52	22.82	23.11	23.40	23.69	23.99	24.28	24.57	
118	20.65	21.24	21.54	21.83	22.13	22.42	22.72	23.01	23.31	23.60	23.90	24.19	24.49	24.78	
119	20.82	21.42	21.72	22.02	22.31	22.61	22.91	23.21	23.51	23.80	24.10	24.40	24.70	25.00	
120	21.00	21.60	21.90	22.20	22.50	22.80	23.10	23.40	23.70	24.00	24.30	24.60	24.90	25.20	
200	35.00	36.00	36.50	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50	41.00	41.50	42.00	
300	52.50	54.00	54.75	55.50	56.25	57.00	57.75	58.50	59.25	60.00	60.75	61.50	62.25	63.00	
400	70.00	72.00	73.00	74.00	75.00	76.00	77.00	78.00	79.00	80.00	81.00	82.00	83.00	84.00	
500	87.50	90.00	91.25	92.50	93.75	95.00	96.25	97.50	98.75	100.00	101.25	102.50	103.75	105.00	
600	105.00	108.00	109.50	111.00	112.50	114.00	115.25	117.00	118.50	120.00	121.50	123.00	124.50	126.00	
700	122.50	126.00	127.75	129.50	131.25	133.00	134.75	136.50	138.25	140.00	141.75	143.50	145.25	147.00	
800	140.00	144.00	146.00	148.00	150.00	152.00	154.75	156.00	158.00	160.00	162.00	164.00	166.00	168.00	
900	157.50	162.00	164.25	166.50	168.75	171.00	173.25	175.50	177.75	180.00	182.25	184.50	186.75	189.00	
1000	175.00	180.00	182.50	185.00	187.50	190.00	192.50	195.00	197.50	200.00	202.50	205.00	207.50	210.00	
2000	350.00	360.00	365.00	370.00	375.00	380.00	385.00	390.00	395.00	400.00	405.00	410.00	415.00	420.00	

FROM 17½ TO 26½ CENTS PER SQUARE FOOT.

Amt.	CENTS PER FOOT.														
	21½	21¾	21½	22	22¼	22½	23	23¾	24	24½	25	25¾	26	26½	
66	14.03	14.19	14.36	14.52	14.69	14.85	15.18	15.51	15.84	16.17	16.50	16.83	17.16	17.49	
67	14.24	14.41	14.57	14.74	14.91	15.08	15.41	15.75	16.08	16.42	16.75	17.09	17.42	17.76	
68	14.45	14.62	14.79	14.96	15.13	15.30	15.64	15.98	16.32	16.66	17.00	17.34	17.68	18.02	
69	14.66	14.84	15.01	15.18	15.35	15.53	15.87	16.22	16.56	16.91	17.25	17.60	17.94	18.29	
70	14.88	15.05	15.23	15.40	15.58	15.75	16.10	16.45	16.80	17.15	17.50	17.85	18.20	18.55	
71	15.09	15.27	15.44	15.62	15.80	15.98	16.33	16.69	17.04	17.40	17.75	18.11	18.46	18.82	
72	15.30	15.48	15.66	15.84	16.02	16.20	16.56	16.92	17.28	17.64	18.00	18.36	18.72	19.08	
73	15.51	15.70	15.88	16.06	16.24	16.43	16.79	17.16	17.52	17.89	18.25	18.62	18.98	19.35	
74	15.73	15.91	16.10	16.28	16.47	16.65	17.02	17.39	17.76	18.13	18.50	18.87	19.24	19.61	
75	15.94	16.13	16.31	16.50	16.69	16.88	17.25	17.63	18.00	18.38	18.75	19.13	19.50	19.88	
76	16.15	16.34	16.53	16.72	16.91	17.10	17.48	17.86	18.24	18.62	19.00	19.38	19.76	20.14	
77	16.36	16.56	16.75	16.94	17.13	17.33	17.71	18.10	18.48	18.87	19.25	19.64	20.02	20.41	
78	16.58	16.77	16.97	17.16	17.36	17.55	17.94	18.33	18.72	19.11	19.50	19.89	20.28	20.67	
79	16.79	16.99	17.18	17.38	17.58	17.78	18.17	18.57	18.96	19.36	19.75	20.15	20.54	20.94	
80	17.00	17.20	17.40	17.60	17.80	18.00	18.40	18.80	19.20	19.60	20.00	20.40	20.80	21.20	
81	17.21	17.42	17.62	17.82	18.02	18.23	18.63	19.04	19.44	19.85	20.25	20.66	21.06	21.47	
82	17.43	17.63	17.84	18.04	18.25	18.45	18.86	19.27	19.68	20.09	20.50	20.91	21.32	21.73	
83	17.64	17.85	18.05	18.26	18.47	18.68	19.09	19.51	19.92	20.34	20.75	21.17	21.58	22.00	
84	17.85	18.06	18.27	18.48	18.69	18.90	19.32	19.74	20.16	20.58	21.00	21.42	21.84	22.26	
85	18.06	18.28	18.49	18.70	18.91	19.13	19.55	19.98	20.40	20.83	21.25	21.68	22.10	22.53	
86	18.28	18.49	18.71	18.92	19.14	19.35	19.78	20.21	20.64	21.07	21.50	21.93	22.36	22.79	
87	18.49	18.71	18.92	19.14	19.36	19.58	20.01	20.45	20.88	21.32	21.75	22.19	22.62	23.06	
88	18.70	18.92	19.14	19.36	19.58	19.80	20.24	20.68	21.12	21.56	22.00	22.44	22.88	23.32	
89	18.91	19.14	19.36	19.58	19.80	20.03	20.47	20.92	21.36	21.81	22.25	22.70	23.14	23.59	
90	19.13	19.35	19.58	19.80	20.03	20.25	20.70	21.15	21.60	22.05	22.50	22.95	23.40	23.85	
91	19.34	19.57	19.79	20.02	20.25	20.48	20.93	21.39	21.84	22.30	22.75	23.21	23.66	24.12	
92	19.55	19.78	20.01	20.24	20.47	20.70	21.16	21.62	22.08	22.54	23.00	23.46	23.92	24.38	
93	19.76	20.00	20.23	20.46	20.69	20.93	21.39	21.86	22.32	22.79	23.25	23.72	24.18	24.65	
94	19.98	20.21	20.45	20.68	20.92	21.15	21.62	22.09	22.56	23.03	23.50	23.97	24.44	24.91	
95	20.19	20.43	20.66	20.90	21.14	21.38	21.85	22.33	22.80	23.28	23.75	24.23	24.70	25.18	
96	20.40	20.64	20.88	21.12	21.36	21.60	22.08	22.56	23.04	23.52	24.00	24.48	24.96	25.44	
97	20.61	20.86	21.10	21.34	21.58	21.83	22.31	22.80	23.28	23.77	24.25	24.74	25.22	25.71	
98	20.83	21.07	21.32	21.56	21.81	22.05	22.54	23.03	23.52	24.01	24.50	24.99	25.48	25.97	
99	21.04	21.29	21.53	21.78	22.03	22.28	22.77	23.27	23.76	24.26	24.75	25.25	25.74	26.24	
100	21.25	21.50	21.75	22.00	22.25	22.50	23.00	23.50	24.00	24.50	25.00	25.50	26.00	26.50	
101	21.46	21.72	21.97	22.22	22.47	22.73	23.23	23.74	24.24	24.75	25.25	25.76	26.26	26.77	
102	21.68	21.93	22.19	22.44	22.70	22.95	23.46	23.97	24.48	24.99	25.50	26.01	26.52	27.03	
103	21.89	22.15	22.40	22.66	22.92	23.18	23.69	24.21	24.72	25.24	25.75	26.27	26.78	27.30	
104	22.10	22.36	22.62	22.88	23.14	23.40	23.92	24.44	24.96	25.48	26.00	26.52	27.04	27.56	
105	22.31	22.58	22.84	23.10	23.36	23.63	24.15	24.68	25.20	25.73	26.25	26.78	27.30	27.83	
106	22.53	22.79	23.06	23.32	23.59	23.85	24.38	24.91	25.44	25.97	26.50	27.03	27.56	28.09	
107	22.74	23.01	23.27	23.54	23.81	24.08	24.61	25.15	25.68	26.22	26.75	27.29	27.82	28.36	
108	22.95	23.22	23.49	23.76	24.03	24.30	24.84	25.38	25.92	26.46	27.00	27.54	28.08	28.62	
109	23.16	23.44	23.71	23.98	24.25	24.53	25.07	25.62	26.16	26.71	27.25	27.80	28.34	28.89	
110	23.38	23.65	23.93	24.20	24.48	24.75	25.30	25.85	26.40	26.95	27.50	28.05	28.60	29.15	
111	23.59	23.87	24.14	24.42	24.70	24.98	25.53	26.09	26.64	27.20	27.75	28.31	28.86	29.42	
112	23.80	24.08	24.36	24.64	24.92	25.20	25.76	26.32	26.88	27.44	28.00	28.56	29.12	29.68	
113	24.02	24.30	24.58	24.86	25.14	25.43	25.99	26.56	27.12	27.69	28.25	28.82	29.38	29.95	
114	24.23	24.51	24.80	25.08	25.37	25.65	26.22	26.79	27.36	27.93	28.50	29.07	29.64	30.21	
115	24.44	24.73	25.01	25.30	25.59	25.88	26.45	27.03	27.60	28.18	28.75	29.33	29.90	30.48	
116	24.65	24.94	25.23	25.52	25.81	26.10	26.68	27.26	27.84	28.42	29.00	29.58	30.16	30.74	
117	24.86	25.16	25.45	25.74	26.03	26.33	26.91	27.50	28.08	28.67	29.25	29.84	30.42	31.01	
118	25.08	25.37	25.67	25.96	26.26	26.55	27.14	27.73	28.32	28.91	29.50	30.09	30.68	31.27	
119	25.29	25.59	25.88	26.18	26.48	26.78	27.37	27.97	28.56	29.16	29.75	30.35	30.94	31.54	
120	25.50	25.80	26.10	26.40	26.70	27.00	27.60	28.20	28.80	29.40	30.00	30.60	31.20	31.80	
200	42.50	43.00	43.50	44.00	44.50	45.00	46.00	47.00	48.00	49.00	50.00	51.00	52.00	53.00	
300	63.75	64.50	65.25	66.00	66.75	67.50	69.00	70.50	72.00	73.50	75.00	76.50	78.00	79.50	
400	85.00	86.00	87.00	88.00	89.00	90.00	92.00	94.00	96.00	98.00	100.00	102.00	104.00	106.00	
500	106.25	107.50	108.75	110.00	111.25	112.50	115.00	117.50	120.00	122.50	125.00	127.50	130.00	132.50	
600	127.50	129.00	130.50	132.00	133.50	135.00	138.00	141.00	144.00	147.00	150.00	153.00	156.00	159.00	
700	148.75	150.50	152.25	154.00	155.75	157.50	161.00	164.50	168.00	171.50	175.00	178.50	182.00	185.50	
800	170.00	172.00	174.00	176.00	178.00	180.00	184.00	188.00	192.00	196.00	200.00	204.00	208.00	212.00	
900	191.25	193.50	195.75	198.00	200.25	202.50	207.00	211.50	216.00	220.50	225.00	229.50	234.00	238.50	
1000	212.50	215.00	217.50	220.00	222.50	225.00	230.00	235.00	240.00	245.00	250.00	255.00	260.00	265.00	
2000	425.00	430.00	435.00	440.00	445.00	450.00	460.00	470.00	480.00	490.00	500.00	510.00	520.00	530.00	

COST OR SELLING PRICE OF RADIATION

Amt.	CENTS PER FOOT.													
	27	27½	28	28½	29	29½	30	30½	31	32	33	34	35	36
1	.27	.28	.28	.29	.29	.30	.30	.31	.31	.32	.33	.34	.35	.36
2	.54	.55	.56	.57	.58	.59	.60	.61	.62	.64	.66	.68	.70	.72
3	.81	.83	.84	.86	.87	.89	.90	.92	.93	.96	.99	1.02	1.05	1.08
4	1.08	1.10	1.12	1.14	1.16	1.18	1.20	1.22	1.24	1.28	1.32	1.36	1.40	1.44
5	1.35	1.38	1.40	1.43	1.45	1.48	1.50	1.53	1.55	1.60	1.65	1.70	1.75	1.80
6	1.62	1.65	1.68	1.71	1.74	1.77	1.80	1.83	1.86	1.92	1.98	2.04	2.10	2.16
7	1.89	1.93	1.96	2.00	2.03	2.07	2.10	2.14	2.17	2.24	2.31	2.38	2.45	2.52
8	2.16	2.20	2.24	2.28	2.32	2.36	2.40	2.44	2.48	2.56	2.64	2.72	2.80	2.88
9	2.43	2.48	2.52	2.57	2.61	2.66	2.70	2.75	2.79	2.88	2.97	3.06	3.15	3.24
10	2.70	2.75	2.80	2.85	2.90	2.95	3.00	3.05	3.10	3.20	3.30	3.40	3.50	3.60
11	2.97	3.03	3.08	3.14	3.19	3.25	3.30	3.36	3.41	3.52	3.63	3.74	3.85	3.96
12	3.24	3.30	3.36	3.42	3.48	3.54	3.60	3.66	3.72	3.84	3.96	4.08	4.20	4.32
13	3.51	3.58	3.64	3.71	3.77	3.84	3.90	3.97	4.03	4.16	4.29	4.42	4.55	4.68
14	3.78	3.85	3.92	3.99	4.06	4.13	4.20	4.27	4.34	4.48	4.62	4.76	4.90	5.04
15	4.05	4.13	4.20	4.28	4.35	4.43	4.50	4.58	4.65	4.80	4.95	5.10	5.25	5.40
16	4.32	4.40	4.48	4.56	4.64	4.72	4.80	4.88	4.96	5.12	5.28	5.44	5.60	5.76
17	4.59	4.68	4.76	4.85	4.93	5.02	5.10	5.19	5.27	5.44	5.61	5.78	5.95	6.12
18	4.86	4.95	5.04	5.13	5.22	5.31	5.40	5.49	5.58	5.76	5.94	6.12	6.30	6.48
19	5.13	5.23	5.32	5.42	5.51	5.61	5.70	5.80	5.89	6.08	6.27	6.46	6.65	6.84
20	5.40	5.50	5.60	5.70	5.80	5.90	6.00	6.10	6.20	6.40	6.60	6.80	7.00	7.20
21	5.67	5.78	5.88	5.99	6.09	6.20	6.30	6.41	6.51	6.72	6.93	7.14	7.35	7.56
22	5.94	6.05	6.16	6.27	6.38	6.49	6.60	6.71	6.82	7.04	7.26	7.48	7.70	7.92
23	6.21	6.33	6.44	6.56	6.67	6.79	6.90	7.02	7.13	7.36	7.59	7.82	8.05	8.28
24	6.48	6.60	6.72	6.84	6.96	7.08	7.20	7.32	7.44	7.68	7.92	8.16	8.40	8.64
25	6.75	6.88	7.00	7.13	7.25	7.38	7.50	7.63	7.75	8.00	8.25	8.50	8.75	9.00
26	7.02	7.15	7.28	7.41	7.54	7.67	7.80	7.93	8.06	8.32	8.58	8.84	9.10	9.36
27	7.29	7.43	7.56	7.70	7.83	7.97	8.10	8.24	8.37	8.64	8.91	9.18	9.45	9.72
28	7.56	7.70	7.84	7.98	8.12	8.26	8.40	8.54	8.68	8.96	9.24	9.52	9.80	10.08
29	7.83	7.98	8.12	8.27	8.41	8.56	8.70	8.85	8.99	9.28	9.57	9.86	10.15	10.44
30	8.10	8.25	8.40	8.55	8.70	8.85	9.00	9.15	9.30	9.60	9.90	10.20	10.50	10.80
31	8.37	8.53	8.68	8.84	8.99	9.15	9.30	9.46	9.61	9.92	10.23	10.54	10.85	11.16
32	8.64	8.80	8.96	9.12	9.28	9.44	9.60	9.76	9.92	10.24	10.56	10.88	11.20	11.52
33	8.91	9.08	9.24	9.41	9.57	9.74	9.90	10.07	10.23	10.56	10.89	11.22	11.55	11.88
34	9.18	9.35	9.52	9.69	9.86	10.03	10.20	10.37	10.54	10.88	11.22	11.56	11.90	12.24
35	9.45	9.63	9.80	9.98	10.15	10.33	10.50	10.68	10.85	11.20	11.55	11.90	12.25	12.60
36	9.72	9.90	10.08	10.26	10.44	10.62	10.80	10.98	11.16	11.52	11.88	12.24	12.60	12.96
37	9.99	10.18	10.36	10.55	10.73	10.92	11.10	11.29	11.47	11.84	12.21	12.58	12.95	13.32
38	10.26	10.45	10.64	10.83	11.02	11.21	11.40	11.59	11.78	12.16	12.54	12.92	13.30	13.68
39	10.53	10.73	10.92	11.12	11.31	11.51	11.70	11.90	12.09	12.48	12.87	13.26	13.65	14.04
40	10.80	11.00	11.20	11.40	11.60	11.80	12.00	12.20	12.40	12.80	13.20	13.60	14.00	14.40
41	11.07	11.28	11.48	11.69	11.89	12.10	12.30	12.51	12.71	13.12	13.53	13.94	14.35	14.76
42	11.34	11.55	11.76	11.97	12.18	12.39	12.60	12.81	13.02	13.44	13.86	14.28	14.70	15.12
43	11.61	11.83	12.04	12.26	12.47	12.69	12.90	13.12	13.33	13.76	14.19	14.62	15.05	15.48
44	11.88	12.10	12.32	12.54	12.76	12.98	13.20	13.42	13.64	14.08	14.52	14.96	15.40	15.84
45	12.15	12.38	12.60	12.83	13.05	13.28	13.50	13.73	13.95	14.40	14.85	15.30	15.75	16.20
46	12.42	12.65	12.88	13.11	13.34	13.57	13.80	14.03	14.26	14.72	15.18	15.64	16.10	16.56
47	12.69	12.93	13.16	13.40	13.63	13.87	14.10	14.34	14.57	15.04	15.51	15.98	16.45	16.92
48	12.96	13.20	13.44	13.68	13.92	14.16	14.40	14.64	14.88	15.36	15.84	16.32	16.80	17.28
49	13.23	13.48	13.72	13.97	14.21	14.46	14.70	14.95	15.19	15.68	16.17	16.66	17.15	17.64
50	13.50	13.75	14.00	14.25	14.50	14.75	15.00	15.25	15.50	16.00	16.50	17.00	17.50	18.00
51	13.77	14.03	14.28	14.54	14.79	15.05	15.30	15.56	15.81	16.32	16.83	17.34	17.85	18.36
52	14.04	14.30	14.56	14.82	15.08	15.34	15.60	15.86	16.12	16.64	17.16	17.68	18.20	18.72
53	14.31	14.58	14.84	15.11	15.37	15.64	15.90	16.17	16.43	16.96	17.49	18.02	18.55	19.08
54	14.58	14.85	15.12	15.39	15.66	15.93	16.20	16.47	16.74	17.28	17.82	18.36	18.90	19.44
55	14.85	15.13	15.40	15.68	15.95	16.23	16.50	16.78	17.05	17.60	18.15	18.70	19.25	19.80
56	15.12	15.40	15.68	15.96	16.24	16.52	16.80	17.08	17.36	17.92	18.48	19.04	19.60	20.16
57	15.39	15.68	15.96	16.25	16.53	16.82	17.10	17.39	17.67	18.24	18.81	19.38	19.95	20.52
58	15.66	15.95	16.24	16.53	16.82	17.11	17.40	17.69	17.98	18.56	19.14	19.72	20.30	20.88
59	15.93	16.23	16.52	16.82	17.11	17.41	17.70	18.00	18.29	18.88	19.47	20.06	20.65	21.24
60	16.20	16.50	16.80	17.10	17.40	17.70	18.00	18.30	18.60	19.20	19.80	20.40	21.00	21.60
61	16.47	16.78	17.08	17.39	17.69	18.00	18.30	18.61	18.91	19.52	20.13	20.74	21.35	21.96
62	16.74	17.05	17.36	17.67	17.98	18.29	18.60	18.91	19.22	19.84	20.46	21.08	21.70	22.32
63	17.01	17.33	17.64	17.96	18.27	18.59	18.90	19.22	19.53	20.16	20.79	21.42	22.05	22.68
64	17.28	17.60	17.92	18.24	18.56	18.88	19.20	19.52	19.84	20.48	21.12	21.76	22.40	23.04
65	17.55	17.88	18.20	18.53	18.85	19.18	19.50	19.83	20.15	20.80	21.45	22.10	22.75	23.40

FROM 27 TO 50 CENTS PER SQUARE FOOT.

Amt.	CENTS PER FOOT.														
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	
2	.74	.76	.78	.80	.82	.84	.86	.88	.90	.92	.94	.96	.98	1.00	
3	1.11	1.14	1.17	1.20	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47	1.50	
4	1.48	1.52	1.56	1.60	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.92	1.96	2.00	
5	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	
6	2.22	2.28	2.34	2.40	2.46	2.52	2.58	2.64	2.70	2.76	2.82	2.88	2.94	3.00	
7	2.59	2.66	2.73	2.80	2.87	2.94	3.01	3.08	3.15	3.22	3.29	3.36	3.43	3.50	
8	2.96	3.04	3.12	3.20	3.28	3.36	3.44	3.52	3.60	3.68	3.76	3.84	3.92	4.00	
9	3.33	3.42	3.51	3.60	3.69	3.78	3.87	3.96	4.05	4.14	4.23	4.32	4.41	4.50	
10	3.70	3.80	3.90	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00	
11	4.07	4.18	4.29	4.40	4.51	4.62	4.73	4.84	4.95	5.06	5.17	5.28	5.39	5.50	
12	4.44	4.56	4.68	4.80	4.92	5.04	5.16	5.28	5.40	5.52	5.64	5.76	5.88	6.00	
13	4.81	4.94	5.07	5.20	5.33	5.46	5.59	5.72	5.85	5.98	6.11	6.24	6.37	6.50	
14	5.18	5.32	5.46	5.60	5.74	5.88	6.02	6.16	6.30	6.44	6.58	6.72	6.86	7.00	
15	5.55	5.70	5.85	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	7.50	
16	5.92	6.08	6.24	6.40	6.56	6.72	6.88	7.04	7.20	7.36	7.52	7.68	7.84	8.00	
17	6.29	6.46	6.63	6.80	6.97	7.14	7.31	7.48	7.65	7.82	7.99	8.16	8.33	8.50	
18	6.66	6.84	7.02	7.20	7.38	7.56	7.74	7.92	8.10	8.28	8.46	8.64	8.82	9.00	
19	7.03	7.22	7.41	7.60	7.79	7.98	8.17	8.36	8.55	8.74	8.93	9.12	9.31	9.50	
20	7.40	7.60	7.80	8.00	8.20	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.80	10.00	
21	7.77	7.98	8.19	8.40	8.61	8.82	9.03	9.24	9.45	9.66	9.87	10.08	10.29	10.50	
22	8.14	8.36	8.58	8.80	9.02	9.24	9.46	9.68	9.90	10.12	10.34	10.56	10.78	11.00	
23	8.51	8.74	8.97	9.20	9.43	9.66	9.89	10.12	10.35	10.58	10.81	11.04	11.27	11.50	
24	8.88	9.12	9.36	9.60	9.84	10.08	10.32	10.56	10.80	11.04	11.28	11.52	11.76	12.00	
25	9.25	9.50	9.75	10.00	10.25	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25	12.50	
26	9.62	9.88	10.14	10.40	10.66	10.92	11.18	11.44	11.70	11.96	12.22	12.48	12.74	13.00	
27	9.99	10.26	10.53	10.80	11.07	11.34	11.61	11.88	12.15	12.42	12.69	12.96	13.23	13.50	
28	10.36	10.64	10.92	11.20	11.48	11.76	12.04	12.32	12.60	12.88	13.16	13.44	13.72	14.00	
29	10.73	11.02	11.31	11.60	11.89	12.18	12.47	12.76	13.05	13.34	13.63	13.92	14.21	14.50	
30	11.10	11.40	11.70	12.00	12.30	12.60	12.90	13.20	13.50	13.80	14.10	14.40	14.70	15.00	
31	11.47	11.78	12.09	12.40	12.71	13.02	13.33	13.64	13.95	14.26	14.57	14.88	15.19	15.50	
32	11.84	12.16	12.48	12.80	13.12	13.44	13.76	14.08	14.40	14.72	15.04	15.36	15.68	16.00	
33	12.21	12.54	12.87	13.20	13.53	13.86	14.19	14.52	14.85	15.18	15.51	15.84	16.17	16.50	
34	12.58	12.92	13.26	13.60	13.94	14.28	14.62	14.96	15.30	15.64	15.98	16.32	16.66	17.00	
35	12.95	13.30	13.65	14.00	14.35	14.70	15.05	15.40	15.75	16.10	16.45	16.80	17.15	17.50	
36	13.32	13.68	14.04	14.40	14.76	15.12	15.48	15.84	16.20	16.56	16.92	17.28	17.64	18.00	
37	13.69	14.06	14.43	14.80	15.17	15.54	15.91	16.28	16.65	17.02	17.39	17.76	18.13	18.50	
38	14.06	14.44	14.82	15.20	15.58	15.96	16.34	16.72	17.10	17.48	17.86	18.24	18.62	19.00	
39	14.43	14.82	15.21	15.60	15.99	16.38	16.77	17.16	17.55	17.94	18.33	18.72	19.11	19.50	
40	14.80	15.20	15.60	16.00	16.40	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60	20.00	
41	15.17	15.58	15.99	16.40	16.81	17.22	17.63	18.04	18.45	18.86	19.27	19.68	20.09	20.50	
42	15.54	15.96	16.38	16.80	17.22	17.64	18.06	18.48	18.90	19.32	19.74	20.16	20.58	21.00	
43	15.91	16.34	16.77	17.20	17.63	18.06	18.49	18.92	19.35	19.78	20.21	20.64	21.07	21.50	
44	16.28	16.72	17.16	17.60	18.04	18.48	18.92	19.36	19.80	20.24	20.68	21.12	21.56	22.00	
45	16.65	17.10	17.55	18.00	18.45	18.90	19.35	19.80	20.25	20.70	21.15	21.60	22.05	22.50	
46	17.02	17.48	17.94	18.40	18.86	19.32	19.78	20.24	20.70	21.16	21.62	22.08	22.54	23.00	
47	17.39	17.86	18.33	18.80	19.27	19.74	20.21	20.68	21.15	21.62	22.09	22.56	23.03	23.50	
48	17.76	18.24	18.72	19.20	19.68	20.16	20.64	21.12	21.60	22.08	22.56	23.04	23.52	24.00	
49	18.13	18.62	19.11	19.60	20.09	20.58	21.07	21.56	22.05	22.54	23.03	23.52	24.01	24.50	
50	18.50	19.00	19.50	20.00	20.50	21.00	21.50	22.00	22.50	23.00	23.50	24.00	24.50	25.00	
51	18.87	19.38	19.89	20.40	20.91	21.42	21.93	22.44	22.95	23.46	23.97	24.48	24.99	25.50	
52	19.24	19.76	20.28	20.80	21.32	21.84	22.36	22.88	23.40	23.92	24.44	24.96	25.48	26.00	
53	19.61	20.14	20.67	21.20	21.73	22.26	22.79	23.32	23.85	24.38	24.91	25.44	25.97	26.50	
54	19.98	20.52	21.06	21.60	22.14	22.68	23.22	23.76	24.30	24.84	25.38	25.92	26.46	27.00	
55	20.35	20.90	21.45	22.00	22.55	23.10	23.65	24.20	24.75	25.30	25.85	26.40	26.95	27.50	
56	20.72	21.28	21.84	22.40	22.96	23.52	24.08	24.64	25.20	25.76	26.32	26.88	27.44	28.00	
57	21.09	21.66	22.23	22.80	23.37	23.94	24.51	25.08	25.65	26.22	26.79	27.36	27.93	28.50	
58	21.46	22.04	22.62	23.20	23.78	24.36	24.94	25.52	26.10	26.68	27.26	27.84	28.42	29.00	
59	21.83	22.42	23.01	23.60	24.19	24.78	25.37	25.96	26.55	27.14	27.73	28.32	28.91	29.50	
60	22.20	22.80	23.40	24.00	24.60	25.20	25.80	26.40	27.00	27.60	28.20	28.80	29.40	30.00	
61	22.57	23.18	23.79	24.40	25.01	25.62	26.23	26.84	27.45	28.06	28.67	29.28	29.89	30.50	
62	22.94	23.56	24.18	24.80	25.42	26.04	26.66	27.28	27.90	28.52	29.14	29.76	30.38	31.00	
63	23.31	23.94	24.57	25.20	25.83	26.46	27.09	27.72	28.35	28.98	29.61	30.24	30.87	31.50	
64	23.68	24.32	24.96	25.60	26.24	26.88	27.52	28.16	28.80	29.44	30.08	30.72	31.36	32.00	
65	24.05	24.70	25.35	26.00	26.65	27.30	27.95	28.60	29.25	29.90	30.55	31.20	31.85	32.50	

COST OR SELLING PRICE OF RADIATORS

Amt.	CENTS PER FOOT.													
	27	27½	28	28½	29	29½	30	30½	31	32	33	34	35	36
66	17.82	18.15	18.48	18.81	19.14	19.47	19.80	20.13	20.46	21.12	21.78	22.44	23.10	23.76
67	18.09	18.43	18.76	19.10	19.43	19.77	20.10	20.44	20.77	21.44	22.11	22.78	23.45	24.12
68	18.36	18.70	19.04	19.38	19.72	20.06	20.40	20.74	21.08	21.76	22.44	23.12	23.80	24.48
69	18.63	18.98	19.32	19.67	20.01	20.36	20.70	21.05	21.39	22.08	22.77	23.46	24.15	24.84
70	18.90	19.25	19.60	19.95	20.30	20.65	21.00	21.35	21.70	22.40	23.10	23.80	24.50	25.20
71	19.17	19.53	19.88	20.24	20.59	20.95	21.30	21.66	22.01	22.72	23.43	24.14	24.85	25.56
72	19.44	19.80	20.16	20.52	20.88	21.24	21.60	21.96	22.32	23.04	23.76	24.48	25.20	25.92
73	19.71	20.08	20.44	20.81	21.17	21.54	21.90	22.27	22.63	23.36	24.09	24.82	25.55	26.28
74	19.98	20.35	20.72	21.10	21.46	21.83	22.20	22.57	22.94	23.68	24.42	25.16	25.90	26.64
75	20.25	20.63	21.00	21.38	21.75	22.13	22.50	22.88	23.25	24.00	24.75	25.50	26.25	27.00
76	20.52	20.90	21.28	21.66	22.04	22.42	22.80	23.18	23.56	24.32	25.08	25.84	26.60	27.36
77	20.79	21.18	21.56	21.95	22.33	22.72	23.10	23.49	23.87	24.64	25.41	26.18	26.95	27.72
78	21.06	21.45	21.84	22.23	22.62	23.01	23.40	23.79	24.18	24.96	25.74	26.52	27.30	28.08
79	21.33	21.73	22.12	22.52	22.91	23.31	23.70	24.10	24.49	25.28	26.07	26.86	27.65	28.44
80	21.60	22.00	22.40	22.80	23.20	23.60	24.00	24.40	24.80	25.60	26.40	27.20	28.00	28.80
81	21.87	22.28	22.68	23.09	23.49	23.90	24.30	24.71	25.11	25.92	26.73	27.54	28.35	29.16
82	22.14	22.55	22.96	23.37	23.78	24.19	24.60	25.01	25.42	26.24	27.06	27.88	28.70	29.52
83	22.41	22.83	23.24	23.66	24.07	24.49	24.90	25.32	25.73	26.56	27.39	28.22	29.05	29.88
84	22.68	23.10	23.52	23.94	24.36	24.78	25.20	25.62	26.04	26.88	27.72	28.56	29.40	30.24
85	22.95	23.38	23.80	24.23	24.65	25.08	25.50	25.93	26.35	27.20	28.05	28.90	29.75	30.60
86	23.22	23.65	24.08	24.51	24.94	25.37	25.80	26.23	26.66	27.52	28.38	29.24	30.10	30.96
87	23.49	23.93	24.36	24.80	25.23	25.67	26.10	26.54	26.97	27.84	28.71	29.58	30.45	31.32
88	23.76	24.20	24.64	25.08	25.52	25.96	26.40	26.84	27.28	28.16	29.04	29.92	30.80	31.68
89	24.03	24.48	24.92	25.37	25.81	26.26	26.70	27.15	27.59	28.48	29.37	30.26	31.15	32.04
90	24.30	24.75	25.20	25.65	26.10	26.55	27.00	27.45	27.90	28.80	29.70	30.60	31.50	32.40
91	24.57	25.03	25.48	25.94	26.39	26.85	27.30	27.76	28.21	29.12	30.03	30.94	31.85	32.76
92	24.84	25.30	25.76	26.22	26.68	27.14	27.60	28.06	28.52	29.44	30.36	31.28	32.20	33.12
93	25.11	25.58	26.04	26.51	26.97	27.44	27.90	28.37	28.83	29.76	30.69	31.62	32.55	33.48
94	25.38	25.85	26.32	26.79	27.26	27.73	28.20	28.67	29.14	30.08	31.02	31.96	32.90	33.84
95	25.65	26.13	26.60	27.08	27.55	28.03	28.50	28.98	29.45	30.40	31.35	32.30	33.25	34.20
96	25.92	26.40	26.88	27.36	27.84	28.32	28.80	29.28	29.76	30.72	31.68	32.64	33.60	34.56
97	26.19	26.68	27.16	27.65	28.13	28.62	29.10	29.59	30.07	31.04	32.01	32.98	33.95	34.92
98	26.46	26.95	27.44	27.93	28.42	28.91	29.40	29.89	30.38	31.36	32.34	33.32	34.30	35.28
99	26.73	27.23	27.72	28.22	28.71	29.21	29.70	30.20	30.69	31.68	32.67	33.66	34.65	35.64
100	27.00	27.50	28.00	28.50	29.00	29.50	30.00	30.50	31.00	32.00	33.00	34.00	35.00	36.00
101	27.27	27.78	28.28	28.79	29.29	29.80	30.30	30.81	31.31	32.32	33.33	34.34	35.35	36.36
102	27.54	28.05	28.56	29.07	29.58	30.09	30.60	31.11	31.62	32.64	33.66	34.68	35.70	36.72
103	27.81	28.33	28.84	29.36	29.87	30.39	30.90	31.42	31.93	32.96	33.99	35.02	36.05	37.08
104	28.08	28.60	29.12	29.64	30.16	30.68	31.20	31.72	32.24	33.28	34.32	35.36	36.40	37.44
105	28.35	28.88	29.40	29.93	30.45	30.98	31.50	32.03	32.55	33.60	34.65	35.70	36.75	37.80
106	28.62	29.15	29.68	30.21	30.74	31.27	31.80	32.33	32.86	33.92	34.98	36.04	37.10	38.16
107	28.89	29.43	29.96	30.50	31.03	31.57	32.10	32.64	33.17	34.24	35.31	36.38	37.45	38.52
108	29.16	29.70	30.24	30.78	31.32	31.86	32.40	32.94	33.48	34.56	35.64	36.72	37.80	38.88
109	29.43	29.98	30.52	31.07	31.61	32.16	32.70	33.25	33.79	34.88	35.97	37.06	38.15	39.24
110	29.70	30.25	30.80	31.35	31.90	32.45	33.00	33.55	34.10	35.20	36.30	37.40	38.50	39.60
111	29.97	30.53	31.08	31.64	32.19	32.75	33.30	33.86	34.41	35.52	36.63	37.74	38.85	39.96
112	30.24	30.80	31.36	31.92	32.48	33.04	33.60	34.16	34.72	35.84	36.96	38.08	39.20	40.32
113	30.51	31.08	31.64	32.21	32.77	33.34	33.90	34.47	35.03	36.16	37.29	38.42	39.55	40.68
114	30.78	31.35	31.92	32.49	33.06	33.63	34.20	34.77	35.34	36.48	37.62	38.76	39.90	41.04
115	31.05	31.63	32.20	32.78	33.35	33.93	34.50	35.08	35.65	36.80	37.95	39.10	40.25	41.40
116	31.32	31.90	32.48	33.06	33.64	34.22	34.80	35.38	35.96	37.12	38.28	39.44	40.60	41.76
117	31.59	32.18	32.76	33.35	33.93	34.52	35.10	35.69	36.27	37.44	38.61	39.78	40.95	42.12
118	31.86	32.45	33.04	33.63	34.22	34.81	35.40	35.99	36.58	37.76	38.94	40.12	41.30	42.48
119	32.13	32.73	33.32	33.92	34.51	35.10	35.70	36.30	36.89	38.08	39.27	40.46	41.65	42.84
120	32.40	33.00	33.60	34.20	34.80	35.40	36.00	36.60	37.20	38.40	39.60	40.80	42.00	43.20
200	54.00	55.00	56.00	57.00	58.00	59.00	60.00	61.00	62.00	64.00	66.00	68.00	70.00	72.00
300	81.00	82.50	84.00	85.50	87.00	88.50	90.00	91.50	93.00	96.00	99.00	102.00	105.00	108.00
400	108.00	110.00	112.00	114.00	116.00	118.00	120.00	122.00	124.00	128.00	132.00	136.00	140.00	144.00
500	135.00	137.50	140.00	142.50	145.00	147.50	150.00	152.50	155.00	160.00	165.00	170.00	175.00	180.00
600	162.00	165.00	168.00	171.00	174.00	177.00	180.00	183.00	186.00	192.00	198.00	204.00	210.00	216.00
700	189.00	192.50	196.00	199.50	203.00	206.50	210.00	213.50	217.00	224.00	231.00	238.00	245.00	252.00
800	216.00	220.00	224.00	228.00	232.00	236.00	240.00	244.00	248.00	256.00	264.00	272.00	280.00	288.00
900	243.00	247.50	252.00	256.50	261.00	265.50	270.00	274.50	279.00	288.00	297.00	306.00	315.00	324.00
1000	270.00	275.00	280.00	285.00	290.00	295.00	300.00	305.00	310.00	320.00	330.00	340.00	350.00	360.00
2000	540.00	550.00	560.00	570.00	580.00	590.00	600.00	610.00	620.00	640.00	660.00	680.00	700.00	720.00

FROM 27 TO 50 CENTS PER SQUARE FOOT.

Amt.	CENTS PER FOOT.														
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
66	24.42	25.08	25.74	26.40	27.06	27.72	28.38	29.04	29.70	30.36	31.02	31.68	32.34	33.00	
67	24.79	25.46	26.13	26.80	27.47	28.14	28.81	29.48	30.15	30.82	31.49	32.16	32.83	33.50	
68	25.16	25.84	26.52	27.20	27.88	28.56	29.24	29.92	30.60	31.28	31.96	32.64	33.32	34.00	
69	25.53	26.22	26.91	27.60	28.29	28.98	29.67	30.36	31.05	31.74	32.43	33.12	33.81	34.50	
70	25.90	26.60	27.30	28.00	28.70	29.40	30.10	30.80	31.50	32.20	32.90	33.60	34.30	35.00	
71	26.27	26.98	27.69	28.40	29.11	29.82	30.53	31.24	31.95	32.66	33.37	34.08	34.79	35.50	
72	26.64	27.36	28.08	28.80	29.52	30.24	30.96	31.68	32.40	33.12	33.84	34.56	35.28	36.00	
73	27.01	27.74	28.47	29.20	29.93	30.66	31.39	32.12	32.85	33.58	34.31	35.04	35.77	36.50	
74	27.38	28.12	28.86	29.60	30.34	31.08	31.82	32.56	33.30	34.04	34.78	35.52	36.26	37.00	
75	27.75	28.50	29.25	30.00	30.75	31.50	32.25	33.00	33.75	34.50	35.25	36.00	36.75	37.50	
76	28.12	28.88	29.64	30.40	31.16	31.92	32.68	33.44	34.20	34.96	35.72	36.48	37.24	38.00	
77	28.49	29.26	30.03	30.80	31.57	32.34	33.11	33.88	34.65	35.42	36.19	36.96	37.73	38.50	
78	28.86	29.64	30.42	31.20	31.98	32.76	33.54	34.32	35.10	35.88	36.66	37.44	38.22	39.00	
79	29.23	30.02	30.81	31.60	32.39	33.18	33.97	34.76	35.55	36.34	37.13	37.92	38.71	39.50	
80	29.60	30.40	31.20	32.00	32.80	33.60	34.40	35.20	36.00	36.80	37.60	38.40	39.20	40.00	
81	29.97	30.78	31.59	32.40	33.21	34.02	34.83	35.64	36.45	37.26	38.07	38.88	39.69	40.50	
82	30.34	31.16	31.98	32.80	33.62	34.44	35.26	36.08	36.90	37.72	38.54	39.36	40.18	41.00	
83	30.71	31.54	32.37	33.20	34.03	34.86	35.69	36.52	37.35	38.18	39.01	39.84	40.67	41.50	
84	31.08	31.92	32.76	33.60	34.44	35.28	36.12	36.96	37.80	38.64	39.48	40.32	41.16	42.00	
85	31.45	32.30	33.15	34.00	34.85	35.70	36.55	37.40	38.25	39.10	39.95	40.80	41.65	42.50	
86	31.82	32.68	33.54	34.40	35.26	36.12	36.98	37.84	38.70	39.56	40.42	41.28	42.14	43.00	
87	32.19	33.06	33.93	34.80	35.67	36.54	37.41	38.28	39.15	40.02	40.89	41.76	42.63	43.50	
88	32.56	33.44	34.32	35.20	36.08	36.96	37.84	38.72	39.60	40.48	41.36	42.24	43.12	44.00	
89	32.93	33.82	34.71	35.60	36.49	37.38	38.27	39.16	40.05	40.94	41.83	42.72	43.61	44.50	
90	33.30	34.20	35.10	36.00	36.90	37.80	38.70	39.60	40.50	41.40	42.30	43.20	44.10	45.00	
91	33.67	34.58	35.49	36.40	37.31	38.22	39.13	40.04	40.95	41.86	42.77	43.68	44.59	45.50	
92	34.04	34.96	35.88	36.80	37.72	38.64	39.56	40.48	41.40	42.32	43.24	44.16	45.08	46.00	
93	34.41	35.34	36.27	37.20	38.13	39.06	39.99	40.92	41.85	42.78	43.71	44.64	45.57	46.50	
94	34.78	35.72	36.66	37.60	38.54	39.48	40.42	41.36	42.30	43.24	44.18	45.12	46.06	47.00	
95	35.15	36.10	37.05	38.00	38.95	39.90	40.85	41.80	42.75	43.70	44.65	45.60	46.55	47.50	
96	35.52	36.48	37.44	38.40	39.36	40.32	41.28	42.24	43.20	44.16	45.12	46.08	47.04	48.00	
97	35.89	36.86	37.83	38.80	39.77	40.74	41.71	42.68	43.65	44.62	45.59	46.56	47.53	48.50	
98	36.26	37.24	38.22	39.20	40.18	41.16	42.14	43.12	44.10	45.08	46.06	47.04	48.02	49.00	
99	36.63	37.62	38.61	39.60	40.59	41.58	42.57	43.56	44.55	45.54	46.53	47.52	48.51	49.50	
100	37.00	38.00	39.00	40.00	41.00	42.00	43.00	44.00	45.00	46.00	47.00	48.00	49.00	50.00	
101	37.37	38.38	39.39	40.40	41.41	42.42	43.43	44.44	45.45	46.46	47.47	48.48	49.49	50.50	
102	37.74	38.76	39.78	40.80	41.82	42.84	43.86	44.88	45.90	46.92	47.94	48.96	49.98	51.00	
103	38.11	39.14	40.17	41.20	42.23	43.26	44.29	45.32	46.35	47.38	48.41	49.44	50.47	51.50	
104	38.48	39.52	40.56	41.60	42.64	43.68	44.72	45.76	46.80	47.84	48.88	49.92	50.96	52.00	
105	38.85	39.90	40.95	42.00	43.05	44.10	45.15	46.20	47.25	48.30	49.35	50.40	51.45	52.50	
106	39.22	40.28	41.34	42.40	43.46	44.52	45.58	46.64	47.70	48.76	49.82	50.88	51.94	53.00	
107	39.59	40.66	41.73	42.80	43.87	44.94	46.01	47.08	48.15	49.22	50.29	51.36	52.43	53.50	
108	39.96	41.04	42.12	43.20	44.28	45.36	46.44	47.52	48.60	49.68	50.76	51.84	52.92	54.00	
109	40.33	41.42	42.51	43.60	44.69	45.78	46.87	47.96	49.05	50.14	51.23	52.32	53.41	54.50	
110	40.70	41.80	42.90	44.00	45.10	46.20	47.30	48.40	49.50	50.60	51.70	52.80	53.90	55.00	
111	41.07	42.18	43.29	44.40	45.51	46.62	47.73	48.84	49.95	51.06	52.17	53.28	54.39	55.50	
112	41.44	42.56	43.68	44.80	45.92	47.04	48.16	49.28	50.40	51.52	52.64	53.76	54.88	56.00	
113	41.81	42.94	44.07	45.20	46.33	47.46	48.59	49.72	50.85	51.98	53.11	54.24	55.37	56.50	
114	42.18	43.32	44.46	45.60	46.74	47.88	49.02	50.16	51.30	52.44	53.58	54.72	55.86	57.00	
115	42.55	43.70	44.85	46.00	47.15	48.30	49.45	50.60	51.75	52.90	54.05	55.20	56.35	57.50	
116	42.92	44.08	45.24	46.40	47.56	48.72	49.88	51.04	52.20	53.36	54.52	55.68	56.84	58.00	
117	43.29	44.46	45.63	46.80	47.97	49.14	50.31	51.48	52.65	53.82	54.99	56.16	57.33	58.50	
118	43.66	44.84	46.02	47.20	48.38	49.56	50.74	51.92	53.10	54.28	55.46	56.64	57.82	59.00	
119	44.03	45.22	46.41	47.60	48.79	49.98	51.17	52.36	53.55	54.74	55.93	57.12	58.31	59.50	
120	44.40	45.60	46.80	48.00	49.20	50.40	51.60	52.80	54.00	55.20	56.40	57.60	58.80	60.00	
200	74.00	76.00	78.00	80.00	82.00	84.00	86.00	88.00	90.00	92.00	94.00	96.00	98.00	100.00	
300	111.00	114.00	117.00	120.00	123.00	126.00	129.00	132.00	135.00	138.00	141.00	144.00	147.00	150.00	
400	148.00	152.00	156.00	160.00	164.00	168.00	172.00	176.00	180.00	184.00	188.00	192.00	196.00	200.00	
500	185.00	190.00	195.00	200.00	205.00	210.00	215.00	220.00	225.00	230.00	235.00	240.00	245.00	250.00	
600	222.00	228.00	234.00	240.00	246.00	252.00	258.00	264.00	270.00	276.00	282.00	288.00	294.00	300.00	
700	259.00	266.00	273.00	280.00	287.00	294.00	301.00	308.00	315.00	322.00	329.00	336.00	343.00	350.00	
800	296.00	304.00	312.00	320.00	328.00	336.00	344.00	352.00	360.00	368.00	376.00	384.00	392.00	400.00	
900	333.00	342.00	351.00	360.00	369.00	378.00	387.00	396.00	405.00	414.00	423.00	432.00	441.00	450.00	
1000	370.00	380.00	390.00	400.00	410.00	420.00	430.00	440.00	450.00	460.00	470.00	480.00	490.00	500.00	
2000	740.00	760.00	780.00	800.00	820.00	840.00	860.00	880.00	900.00	920.00	940.00	960.00	980.00	1000.00	

NOTE.

In arranging list prices on the following pages it has been the author's aim to make everything subservient to the convenience of the Master Fitter, and to accomplish this, fittings, etc., so far as possible, have been located alphabetically without regard to quality. Boilers and radiators have been located alphabetically under the manufacturer's name for the purpose of keeping all of each make separate. However, this rule has been disregarded whenever a number of radiators having the same rating could be grouped.

Blank spaces have been provided for "Cost," etc., to enable those who so desire to always have with them complete data for estimating work.

It would be impossible to list all makes of the different classes of goods and keep the book within reasonable size, and, therefore, blank spaces have been left, so that any special goods not represented herein may easily be written down in its proper place.

A SUGGESTION.

Prices subject to market change should always be written with a good lead-pencil (not ink), so that they can be erased and changed as occasion demands. It is often a good plan to have a private cipher for costs.

WROUGHT IRON WELDED STEAM,

PRICE LIST AND TABLE

Adopted Jan. 29, 1895.

Kind of Pipe.	Size of Pipe.	PRICE PER FOOT.						Square Feet of Radiation in One Lineal Foot of Pipe.	Square Feet of Radiation Per Cubic Foot of Contents in Pipes.	Actual Diameter in Inches.		Thickness in Inches.
		BLACK.			GALVANIZED.					External.	Internal.	
		1½ In. and Smaller. Per Cent Discount.			1½ In. and Smaller. Per Cent Discount.							
		1½ In. and Larger. Per Cent Discount.			1½ In. and Larger. Per Cent Discount.							
		List.	Cost.	Price.	List.	Cost.	Price.					
Butt Welded.		\$0.05½			\$0.08			.106	276.878	.405	.270	.068
		.05½			.07½			.142	196.428	.540	.364	.088
		.05½			.07½			.176	132.211	.675	.494	.091
		.07			.09½			.220	103.928	.840	.623	.109
		.08½			.11½			.275	74.250	1.050	.824	.113
	1	.11½			.16			.346	57.747	1.315	1.048	.134
	1½	.15½			.22			.434	40.772	1.660	1.380	.140
	2	.26			.31			.494	34.906	1.900	1.611	.145
	2½	.35			.42			.622	28.306	2.375	2.067	.154
	2½	.52			.62			.753	22.665	2.875	2.468	.204
Lap Welded.	3	.68			.80			.916	17.862	3.500	3.067	.217
	3½	.81			.98			1.055	15.371	4.000	3.548	.226
	4	.95			1.16			1.175	13.289	4.500	4.026	.237
	4½	1.25			1.50			1.309	11.807	5.000	4.508	.246
	5	1.42			1.75			1.455	10.476	5.563	5.045	.259
	6	1.85			2.20			1.739	8.660	6.625	6.065	.280
	7	2.45			3.00			1.996	7.425	7.625	7.023	.301
	8	2.95			3.70			2.257	6.500	8.625	7.982	.322
	9	3.75						2.519	5.768	9.625	8.937	.344
	10	4.75						2.816	5.125	10.750	10.018	.366
	11	6.00						3.140	4.571	12.000	11.250	.375
	12	7.00						3.344	4.246	12.750	12.000	.375
	13	8.00						3.663	3.809	14.000	13.250	.375
	14	9.50						3.921	3.540	15.000	14.250	.375
	15	11.00						4.182	3.295	16.000	15.250	.375

CONDENSED LIST PRICE OF FITTINGS.

Size of Pipe.	ELBOWS.			TEES.			Y Bends.	CROSSES.		NIPPLES		Plugs.	Caps 4½ and Larger C. I.	UNIONS.		COUP- LINGS.		Bushings.
	R. H. C. I.	R. and L. and Red C. I.	45 Degrees	Cast Iron.	Cast Iron Reducing.	Malleable.		Cast Iron.	Cast Iron Reducing.	Close R. H.	Short R. and L.			Flange.	Malleable.	R. H.	R. and L.	
1	06	07	10	09	11	09	25	12	14	07	12	04	05	20	07	09	06	
1 1/4	09	11	15	13	15	13	30	18	21	09	15	05	08	25	10	12	07	
1 1/2	13	16	20	20	23	19	40	23	32	10	18	06	12	34	13	18	09	
2	20	23	26	30	35	27	60	40	46	14	24	10	16	46	17	25	13	
2 1/2	25	29	35	38	44	40	90	50	58	17	30	13	24	60	21	36	17	
3	40	46	50	60	70	60	125	80	92	25	40	20	32	80	28	44	27	
3 1/2	75	85	130	110	125	105	225	150	170	56	100	35	45	175	40	50	42	
4	110	125	160	150	175	170	325	220	250	75	125	50	70	225	60	80	60	
4 1/2	135	150	190	200	230	240	450	270	300	100	.....	75	85	275	80	100	80
5	180	210	250	250	290	340	600	350	400	125	.....	85	120	315	100	120	100
5 1/2	285	325	450	400	460	.....	900	570	660	200	.....	175	200	500	165	185	185
6	390	450	550	550	635	.....	1100	780	900	275	.....	240	235	650	240	250	250
6 1/2	700	800	900	1000	1150	.....	1700	1400	1600	400	.....	375	400	800	325	375	375
7	1000	1150	1200	1500	1700	.....	2500	2000	2300	575	.....	550	435	1000	425	550	550

For Discount and Cost see page 80.

GAS, AND WATER PIPE.

OF STANDARD DIMENSIONS.

CIRCUMFERENCE.		TRANSVERSE AREAS.			Length of Pipe per Sq. Foot of		Length of Pipe Containing One Cubic Foot.	Nominal Weight Per Foot.	Number of Threads Per Inch of Screw.	Size of Hole to Drill for Tap.
External.	Internal:	External.	Internal.	Metal.	External Surface.	Internal Surface.				
Inches.	Inches.	Sq. Ins.	Sq. Ins.	Sq. Ins.	Feet.	Feet.	Feet.	Lbs.		
1 272	848	129	0573	0717	9 44	14 15	2513	241	27	21-64
1 696	1 144	229	1041	1249	7 075	10 49	1883 3	42	18	29-64
2 121	1 552	358	1917	1663	5 657	7 73	751 2	559	18	19-32
2 639	1 957	554	3048	2492	4 547	6 13	472 4	837	14	23-32
3 299	2 589	866	5333	3327	3 637	4 635	270	1 115	14	15-16
4 131	3 292	1 358	8626	4954	2 904	3 645	166 9	1 668	11½	1 3-16
5 215	4 335	2 164	1 496	668	2 301	2 768	96 25	2 244	11½	1 15-32
5 969	5 061	2 835	2 038	797	2 01	2 371	70 66	2 678	11½	1 23-32
7 461	6 494	4 443	3 856	1 074	1 608	1 848	42 91	3 609	11½	2 3-16
9 092	7 753	6 492	4 784	1 703	1 328	1 547	30 1	5 739	8	2 ½
10 996	9 636	9 621	7 388	2 243	1 091	1 245	19 5	7 536	8	3 ¼
12 566	11 146	12 566	9 887	2 679	955	1 077	14 57	9 001	8	3 ½
14 137	12 648	15 904	12 73	3 174	849	949	11 31	10 665	8	4 ¼
15 708	14 162	19 635	15 961	3 674	764	848	9 02	12 34	8	4 ¾
17 477	15 849	24 306	19 99	4 316	687	757	7 2	14 502	8	5 5-16
20 813	19 054	34 472	28 888	5 534	577	63	4 98	18 762	8	6 5-16
23 955	22 063	45 664	38 738	6 926	501	544	3 72	23 271	8	7 ¾
27 096	25 076	58 426	50 04	8 386	443	478	2 88	28 177	8	8 ¾
30 238	28 076	72 76	62 73	10 03	397	427	2 29	33 701	8	9 19-32
33 772	31 477	90 763	78 839	11 924	355	382	1 82	40 065	8	10 13-16
37 699	35 343	113 098	89 402	13 696	318	339	1 456	45 95	8	
40 055	37 7	127 677	113 098	14 579	299	319	1 27	48 985	8	
43 982	41 626	153 938	137 887	16 051	273	288	1 04	53 921	8	
47 124	44 768	176 715	159 485	17 23	255	268	903	57 893	8	
50 265	47 909	201 062	182 655	18 407	239	259	788	61 77	8	

LIST PRICE OF FLANGES.

Size.	¾	½	¼	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10	12
Diameter Inches.																			
3	*14																		
3½	17	*17	*18																
4	20	20	21	* 22	* 25														
4½	26	26	28	28	30	* 31													
5	31	31	33	33	35	36													
5½	40	40	40	42	42	42	45												
6	50	50	50	52	52	52	55	55											
6½		55	60	62	62	62	65	65	65										
7			68	72	72	72	75	75	75	75									
7½			80	80	80	80	80	84	87										
8				90	90	90	90	96	1 00	1 04									
8½				1 00	1 00	1 00	1 00	1 08	1 13	1 22									
9				1 10	1 10	1 10	1 15	1 15	1 22	1 26	1 40	1 55	1 65						
9½					1 20	1 25	1 30	1 37	1 55	1 58	1 70	1 80	2 20	2 40					
10						1 45	1 45	1 52	1 75	1 76	1 90	2 00	2 40	2 60					
10½						1 65	1 65	1 69	1 85	1 96	2 10	2 20	2 60	2 80					
11						1 90	1 90	1 90	1 90	2 16	2 32	2 40	2 80	3 00					
11½							2 00	2 12	2 25	2 36	2 54	2 60	3 00	3 20	3 75	4 00			
12								2 25	2 35	2 56	2 76	2 80	3 20	3 40	4 10	4 50			
13									2 60	2 85	3 00	3 05	3 45	4 10	4 50				
14											3 50	3 75	3 75	4 50	5 00	5 75	6 00		
15														4 25	5 00	5 60	6 25	6 60	
16														5 00	5 50	6 25	7 00	7 25	9 00
17															6 25	6 90	7 75	8 00	9 75
18																		9 25	10 75
19																		10 00	12 00
20																		11 00	13 50

Those marked * are drilled for screw. Circular Flanges made to order at double above prices.

IRON PIPE

KIND.	Description.	Per Ct. Dis.	NUMBER OF BRANCHES.							
			2	3	4	5	6	7	8	9
BRANCH TEES.	1 In., Cast Iron	List	.90	1.00	1.20	1.40	1.70	2.15	2.40	2.80
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	1½ In., Cast Iron	List	1.15	1.25	1.45	1.65	1.95	2.40	2.65	3.05
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	1½ In., Cast Iron	List	1.30	1.40	1.60	1.80	2.10	2.55	2.80	3.20
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

KIND.	Description.	Per Ct. Dis.	SIZE.							
			¼	⅜	½	¾	1	1¼	1½	2
CAPS.	Bushings, Black	List	.05	.05	.06	.07	.09	.13	.17	.27
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Above 4 In., Cast Iron	List	.03	.04	.05	.08	.12	.15	.22	.30
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
CEILING PLATES.	Halved, C. I. Solid, C. I. Same List	List	.....	.....	.....	.16	.18	.20	.25	.30
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Malleable, R. H.	List	.05	.06	.07	.10	.13	.17	.21	.28
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
COUPLINGS.	Malleable, R. & L.	List	.07	.08	.11	.15	.20	.25	.30	.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Major's Improved Elastic	List	Per	Doz.	.....	.....	2.50	2.75	3.25	4.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
CROSSES.	Cast Iron	List	.....	.....	.12	.18	.28	.40	.50	.80
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron, Reducing	List	.....	.....	.14	.21	.32	.46	.58	.92
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

FITTINGS.

NUMBER OF BRANCHES.

10	11	12	13	14	15	16					
3.30	4.20	4.75	5.50	6.25	7.00	7.75					
3.55	4.45	5.00	5.75	6.50	7.25	8.00					
3.70	4.60	5.15	5.90	6.65	7.40	8.15					

SIZE.

2½	3	3½	4	4½	5	6	7	8	9	10	12
.42	.60	.80	1.00	1.50	1.85	2.50	3.75	5.50	6.50	7.50	10.00
.45	.70	.80	1.15	1.60	2.00	2.35	4.00	4.35	6.00	7.25	10.00
.35	.50	.60	.70								
.40	.60	.80	1.00	1.50	1.65	2.40	3.25	4.25	5.50	7.50	10.00
.85	1.20										
5.00	6.00										
1.50	2.20	2.70	3.50	5.00	5.70	7.80	14.00	20.00	26.00	40.00	60.00
1.70	2.50	3.00	4.00	6.00	6.60	9.00	16.00	23.00	30.00	46.00	70.00

IRON PIPE

KIND.	Description.	Per Ct. Dis.	SIZE.							
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
ELBOWS.	Cast Iron, R. H.	List	.04	.05	.06	.09	.13	.20	.25	.40
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron, R. & L.	List	.05	.06	.07	.11	.16	.23	.29	.46
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron Reducing, R. H.	List	.....	.....	.07	.11	.16	.23	.29	.46
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Malleable, R. H.	List	.04	.05	.06	.09	.16	.21	.32	.48
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Malleable, R. & L.	List	.05	.06	.08	.12	.20	.27	.40	.60
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	45 Degree, C. I.	List	.....	.10	.10	.15	.20	.26	.35	.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Malleable, with Union	List	.....	.....	.....	.75	.90	1.15	1.60	2.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Double Branch for Hot Water, C. I.	List	.....	.....	.....	.....	.38	.52	.68	.90
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Double Branch for Hot Water, C. I. Flanged	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
FLOOR PLATES.	Long Sweep for Hot Water, C. I.	List	.....	.....	.....	.....	.25	.35	.45	.60
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Long Sweep for Hot Water, Flanged, C. I.	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Solid, C. I.	List	.....	.....	.06	.07	.09	.12	.16	.20
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Halved, C. I.	List	.....	.....	.06	.08	.10	.15	.18	.23
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
EXPANSION JOINTS.		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	All Brass	List	.....	.....	1.50	2.00	2.75	4.00	5.50	8.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Sleeve	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

PIPE SIZE AS PER HEADING ABOVE.

Length of Traverse in Ex. Joints

2

2 1/4

2 1/4

2 1/4

2 1/4

2 1/4

FITTINGS.

SIZE.

2½	3	3½	4	4½	5	6	7	8	9	10	12
.75	1.10	1.35	1.80	2.50	2.85	3.90	7.00	10.00	13.00	20.00	30.00
.85	1.25										
.85	1.25	1.50	2.10	3.00	3.25	4.50	8.00	11.50	15.00	23.00	35.00
.72	1.40	2.00	2.80								
1.30	1.60	1.90	2.50	3.50	4.50	5.50	9.00	12.00		22.00	33.00
1.50	2.25	3.00	3.75	5.25	6.75	9.75	15.00	21.00	25.00	30.00	45.00
			6.00		9.00	12.00	17.25	22.50	27.00	33.00	48.00
1.00	1.50	2.00	2.50	3.50	4.50	6.50	10.00	14.00	17.00	20.00	30.00
			4.00		6.00	8.00	11.00	15.00	18.00	22.00	32.00
.25	.35	.50	.65	.75	.80	1.00					
.30	.40										

PIPE SIZE AS PER HEADING ABOVE.

2½	2¾	3	3¼		5	5	6	7		7	
16.00	24.00										
5.75	8.50	11.50	15.00		34.00	40.00	70.00	90.00		150.00	

IRON PIPE

KIND.	Description.	Per Ct. Dis.	NUMBER OF HOOKS.						
							1	2	3
HOOK PLATES.	For 1 In. Pipe, 2½ In. Between Centers	List	.....	.....	.....	.....	.07	.14	.18
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	For 1½ In. Pipe, 3 In. Between Centers	List	.....	.....	.....	.....	.08	.16	.20
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	For 1½ In. Pipe, 3½ In. Between Centers	List	.....	.....	.....	.....	.12	.24	.30
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	For 2 In. Pipe, 4½ In. Between Centers	List	.....	.....	.....	.....	.18	.36	.50
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....

KIND.	Description.	Per Ct. Dis.	SIZE.							
			¼	⅜	½	¾	1	1¼	1½	2
HANGERS.	Expansion Pipe, or Ring Hooks	List	.....	.....	.....	.22	.25	.30	.38	.44
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Eureka Patent, Adjustable Pipe	List	.....	.....	.15	.18	.18	.20	.25	.28
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Lock Nuts	List	.02	.03	.04	.05	.07	.09	.11	.18
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
NIPPLES.		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Long Screws	List	.30	.35	.40	.55	.75	1.00	1.30	1.70
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Close or Short	List	.05	.06	.07	.09	.10	.14	.17	.25
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Long	List	.07	.09	.10	.11	.15	.20	.25	.35
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	R. & L. Short	List	.10	.10	.12	.15	.18	.24	.30	.40
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	R. & L. Long	List	.12	.14	.16	.20	.24	.35	.46	.60
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

FITTINGS.

NUMBER OF HOOKS.

4	5	6									
.20	.26	.32									
.25	.32	.40									
.36	.45	.60									
.65	.80	.95									

SIZE.

2½	3	3½	4	4½	5	6	7	8	9	10	12
.55	.65	.90	1.15		1.50	2.25					
.33	.38	.45	.55		.65	.75	1.15	1.25			
.40	.50	.70	.95	1.25	1.35	1.90					
2.70	3.70										
.56	.75	1.00	1.25	1.75	2.00	2.75	4.00	5.75	7.00	8.50	12.00
.75	.95	1.25	1.60	2.25	2.60	3.60					
1.00	1.25										
1.30	1.60	2.00	2.40								

IRON PIPE

KIND.	Description.	Per Ct. Dis.	SIZE.							
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
OFFSETS.	Cast Iron	List			.15	.22	.35	.50	.60	.90
		Cost								
		Price								
		List								
		Cost								
		Price								
PLUGS.	Cast Iron	List	.03	.03	.04	.05	.06	.10	.13	.20
		Cost								
	Countersunk	Price								
		List				.07	.09	.11	.15	.22
		Cost								
		Price								
		List								
		Cost								
		Price								
REDUCERS.	4 1/2 and Larger, Cast Iron	List	.03	.03	.05	.10	.16	.20	.28	.45
		Cost								
	Offset, Malleable	Price								
		List					.30	.35	.45	.55
		Cost								
		Price								
	Close Pattern, Malleable, R. H.	List			.13	.20	.30	.45	.65	1.00
		Cost								
		Price								
		List			.14	.25	.38	.55	.80	1.25
	Close Pattern, Malleable, R. & L.	Cost								
		Price								
	Medium Pattern, Malleable	List	Right	Hand	Same	List as	Close	Pattern,	R.H.	
		Cost								
		Price	Left	Hand	Same	List as	Close	Pattern,	L.H.	
		List			.15	.25	.35	.55	.75	1.25
	Open Pattern, Malleable, R. H.	Cost								
		Price								
	Open Pattern, Malleable, R. & L.	List			.18	.30	.43	.70	.95	1.60
		Cost								
		Price								
		List			.10	.15	.22	.34	.45	.75
	Close Pattern, Cast Iron, R. H.	Cost								
		Price								
	Close Pattern, Cast Iron, R. & L.	List			.12	.17	.25	.40	.52	.86
		Cost								
		Price								
		List			.20	.20	.30	.48	.68	1.15
	Open Pattern, Cast Iron, R. H.	Cost								
		Price								
	Open Pattern, Cast Iron, R. & L.	List				.25	.35	.58	.80	1.35
		Cost								
		Price								
		List				.30	.40	.60	.90	1.25
	Back Outlet, Cast Iron, R. H.	Cost								
		Price								
	Back Outlet, Cast Iron, R. & L.	List				.35	.45	.70	1.05	1.45
		Cost								
		Price								

FITTINGS.

[illegible]

MALLEABLE.

DISTANCE FROM CENTER TO CENTER.

Size	$1\frac{1}{2}$	$3\frac{1}{2}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Close Pattern . .	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{3}{16}$	$2\frac{5}{8}$		
Medium Pattern .	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{4}$	$2\frac{1}{2}$	3		
Open Pattern . .	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5

CAST IRON.

DISTANCE FROM CENTER TO CENTER.

Sizes	$1\frac{1}{2}$	$3\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Close Pattern . .	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$3\frac{1}{4}$	$3\frac{3}{4}$	$4\frac{1}{4}$
Open Pattern . .		$1\frac{7}{8}$	$2\frac{3}{8}$	3	$3\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$	$6\frac{1}{2}$

DIMENSIONS OF RETURN BENDS.

IRON PIPE

KIND.	Description.	Per Ct. Dis.		SIZE.							
				1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
TEES.	Malleable	List		.07	.08	.09	.13	.19	.27	.40	.60
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron	List		.06	.07	.09	.13	.20	.30	.38	.60
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron Reducing	List				.11	.15	.23	.35	.44	.70
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron, Screwed, Special for Hot Water	List						.38	.52	.68	.90
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Cast Iron, Flanged, Special for Hot Water	List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
UNIONS.	Malleable	List		.15	.18	.20	.28	.34	.46	.60	.80
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	American	List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Crane's Patent	List						.70	.85	1.15	1.50
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Flange	List					.65	.70	.85	1.15	1.50
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Keystone	List		.20	.24	.28	.35	.40	.56	.80	.95
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
Y'S.	Y Bends, Cast Iron	List				.25	.30	.40	.60	.90	1.25
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List									
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....

[illegible]

IRON PIPE

KIND.	Description.	Per Ct. Dis.	SIZE.							
			$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
	List									
	Cost									
	Price									
	List									
	Cost									
	Price									
	List									
	Cost									
	Price									
	List									
	Cost									
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	Price									
	List									
	Cost									
	Price									
	List									
	Cost									
	Price									

RAILING

KIND.	Description.	Per Ct. Dis.	SIZE.							
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
	List				.10	.15	.20	.25	.35	.90
Acorn Ornament	Cost									
	Price									
	List				.15	.22	.35	.45	.58	1.00
Crosses	Cost									
	Price									
	List				.18	.27	.40	.50	.65	1.35
Crosses, with Side Outlet	Cost									
	Price									
	List				.10	.15	.20	.35	.45	.72
Elbows	Cost									
	Price									

FITTINGS. WASTE BAGS

[illegible]

FITTINGS.

KIND.	Description.	Per Ct. Dls.	SIZE.							
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
	Elbows, with Side Outlet	List			.12	.18	.25	.40	.50	.80
		Cost								
		Price								
	Floor Flanges	List			.12	.12	.15	.20	.28	.30
		Cost								
		Price								
	Tees	List			.12	.18	.25	.40	.50	.75
		Cost								
		Price								
	Tees, with Side Outlet	List			.15	.22	.35	.45	.55	.90
		Cost								
		Price								

BRASS STEAM FITTINGS

KIND.	Description.	Per Ct. Dis.		SIZE.									
				1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Bushings, Red. One Size	List				.07	.09	.13	.21	.38	.50	.67	.84	1.50
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bushings, Red. Two Sizes	List					.09	.13	.21	.38	.50	.67	.84	1.50
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caps, Rough	List			.08	.10	.15	.20	.30	.40	.60	.75	1.25	2.00
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caps, Finished	List			.13	.15	.20	.25	.35	.45	.70	.85	1.55	2.50
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Couplings, Rough	List			.08	.10	.15	.20	.30	.40	.60	.75	1.25	2.00
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Couplings, Finished	List			.13	.15	.20	.25	.35	.45	.70	.85	1.55	2.50
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crosses, Rough	List			.15	.20	.30	.40	.55	.80	1.15	1.40	1.95	4.25
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crosses, Finished	List			.30	.35	.55	.70	.85	1.25	1.90	2.50	3.50	6.25
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elbows, Rough	List			.10	.12	.16	.25	.35	.50	.85	1.15	1.50	3.00
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elbows, Finished	List			.15	.18	.24	.35	.45	.65	1.10	1.50	2.00	3.75
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lock Nuts, Rough	List			.08	.08	.10	.15	.20	.25	.40	.50	.90	1.75
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lock Nuts, Finished	List			.10	.10	.12	.18	.23	.30	.45	.55	1.00	1.90
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	List												
	Cost			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Price			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

FOR IRON PIPE.

KIND.	Description.	Per Ct. Dis.	SIZE.									
			1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Nipples, 4 Inches Long and Less, Finished	List		.15	.20	.30	.35	.45	.60	.90	1.25	1.60	3.00
	Cost											
	Price											
	List											
	Cost											
	Price											
Plugs, Rough	List		.06	.08	.10	.15	.20	.25	.40	.50	.90	1.50
	Cost											
	Price											
Plugs, Finished	List		.10	.12	.15	.20	.25	.30	.50	.70	1.20	2.00
	Cost											
	Price											
	List											
	Cost											
	Price											
Reducers, Rough	List				.14	.20	.30	.35	.50	.65	1.25	
	Cost											
	Price											
Reducers, Finished	List				.20	.25	.35	.40	.60	.75	1.55	
	Cost											
	Price											
	List											
	Cost											
	Price											
Return Bends, Open Pat., Rough	List					.50	.80	1.00	1.50	2.25	3.00	
	Cost											
	Price											
Return Bends, Open Pat., Finished	List					.70	1.00	1.30	2.00	3.00	4.00	
	Cost											
	Price											
	List											
	Cost											
	Price											
Tees, Rough	List		.12	.15	.20	.30	.45	.70	1.00	1.25	1.75	4.00
	Cost											
	Price											
Tees, Finished	List		.20	.25	.35	.50	.65	1.00	1.50	2.00	2.75	5.50
	Cost											
	Price											
	List											
	Cost											
	Price											
Unions, Grown Joint	List		.30	.40	.55	.75	1.00	1.40	1.90	2.75	4.00	6.00
	Cost											
	Price											
	List											
	Cost											
	Price											
	List											
	Cost											
	Price											

AIR VALVES.

KIND.	Trade Name.	Per Ct. Dis.	Quantity.	SIZE.					
				Finished.			Nickel Plated.		
				1/8	1/4	3/8	1/8	1/4	3/8
AUTOMATIC.	Acme, No. 1, Steam, has Evaporating Cup and Cap, or Wood Handle	List	Each					1.15	
		Cost							
		Price							
	Acme, No. 2, Steam, with Drip Pipe Connection	List	Each				1.25		
		Cost							
		Price							
	Acme, No. 3, Steam, with Lock and Shield	List	Each				1.25		
		Cost							
		Price							
	Acme, No. 5, Steam, with Positive Vent	List	Each				1.50		
		Cost							
		Price							
COMMON.	Acme, No. 6, for Steam and Water	List	Each				1.25		
		Cost							
		Price							
	Acme, No. 7, Hot Water, with Drain Connection	List	Each					1.80	
		Cost							
		Price							
		List							
		Cost							
		Price							
	Bundy Baker, Steam, with Drip Connection	List	Each				1.25		
		Cost							
		Price							
	Bundy Baker, Steam, with Evaporation Cup	List	Each				1.50		
		Cost							
		Price							
	Bundy, Steam, A. — without Drip Con. B. — with Drip add 25c. to List	List	Each				1.00		
		Cost							
		Price							
	Bundy, Steam, C. — with Evaporation Cup	List	Each	(Cup	only	60c.)	1.60		
		Cost							
		Price							
	Hodge, "Eureka"	List					1.00		
		Cost							
		Price							
	Common, T. H., Straight	List	Each	.40	.45	.50			
		Cost							
		Price							
	Common, L. H., Straight	List	Each	.55	.60	.65			
		Cost							
		Price							
	Common, T. H., Bent Nozzle	List	Each	.65	.70	.75			
		Cost							
		Price							
	Common, L. H., Bent Nozzle	List	Each	.80	.85	.90			
		Cost							
		Price							
	Common for Radiator	List	Each	.30	.35		.35	.40	
		Cost							
		Price							

AIR VALVES.

KIND.	Trade Name.	Per Ct. Dis.		Quantity.	SIZE.					
					Finished.			Nickel Plated.		
					1/8	1/4	3/8	1/8	1/4	3/8
AUTOMATIC.	Duplex Perfected, No. 1, Steam		List	Each				1.15		
			Cost							
			Price							
	Duplex Perfected, No. 2, Steam. With or without Heat Controller		List	Each				1.15		
			Cost							
			Price							
	Duplex, No. 3, Lock and Shield, Steam. Keys 25c. Extra Net		List	Each				1.35		
			Cost							
			Price							
	Hot Water, Automatic, Van Aukens		List	Each				3.00		
			Cost							
			Price							
COMPRESSION.			List							
			Cost							
			Price							
	Jenkins'		List	Per Doz.				7.50		
			Cost							
			Price							
	Extra Drip Cups for Jenkins' Valves		List	Per Doz.				2.00		
			Cost							
			Price							
			List							
			Cost							
			Price							
AUTOMATIC.	Lock and Shield (Key)		List	Each	.30	.35		.35	.40	
			Cost							
			Price							
	Keys for Lock and Shield		List	Each	.08	.08				
			Cost							
			Price							
			List							
			Cost							
			Price							
	Victor, No. 1		List	Per Doz.				7.50		
			Cost							
			Price							
	Victor, No. 2		List	Per Doz.				7.50		
			Cost							
			Price							
			List							
			Cost							
			Price							
	Wood Handle		List	Each	.65	.70		.70	.75	
			Cost							
			Price							
			List							
			Cost							
			Price							
			List							
			Cost							
			Price							

STEAM RADIATOR VALVES.

KIND.	Description.	Per Ct. Dis.		SIZE.						
				$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
COMMON BRASS SEAT WOOD WHEEL.	Rough Body	List		1.10	1.35	1.60	2.25	3.25	4.50	7.00
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Rough Body, N. P. Trimmings	List		1.30	1.55	1.85	2.50	3.50	4.80	7.50
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Rough Body, Nickel Plated	List		1.40	1.65	1.95	2.65	3.70	5.00	7.75
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Finished Body, Brass Seat	List		1.60	1.85	2.15	2.85	4.00	5.50	8.50
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
JENKINS BROS. WOOD WHEEL.	Finished Body, Nickel Plated	List		1.90	2.15	2.50	3.25	4.45	6.00	9.25
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Rough Body, with Union	List		1.70	2.05	2.45	3.25	4.50	6.50	10.00
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Rough Body, N. P. with Union	List		2.05	2.40	2.85	3.65	5.05	7.10	10.85
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Finished Body, with Union.	List		2.20	2.55	3.00	3.85	5.25	7.50	11.50
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Finished Body, N. P. with Union	List		2.55	2.90	3.40	4.30	5.80	8.10	12.35
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Lock and Shield, List same as above.	List		.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	Keys for Lock and Shield Extra	List		.....	.75	.75	.75	1.00	1.00	1.25
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., W. W. Rough Body, Finished Trimmings.	List		.....	2.00	2.50	3.20	4.50	6.25	10.50
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Finished all over.	List		.....	2.50	3.00	3.75	5.25	7.25	11.75
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Rough Body, Plated Trimmings	List		.....	2.25	2.70	3.50	4.75	6.50	10.75
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Rough Body, Plated all over	List		.....	2.50	2.85	3.65	4.90	6.75	11.00
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Finished and Plated all over	List		.....	2.85	3.10	4.00	5.40	7.75	12.25
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Rough Body, Finished Trimmings, with Union	List		.....	2.75	3.50	4.30	5.85	7.75	12.60
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....
	J. D., Finished all over, with Union.	List		.....	3.20	4.00	4.80	6.40	8.75	13.85
		Cost		.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....

STEAM RADIATOR VALVES.

KIND.	Description.	Per Ct. Dis.		SIZE.							
						1/2	3/4	1	1 1/4	1 1/2	2
JENKINS BROS. W. W.	J. D., Rough Body, Plated Trimmings, with Union		List			3.00	3.75	4.65	6.25	8.00	12.85
			Cost								
			Price								
	J. D., Rough Body, Plated all over, with Union		List			3.20	3.80	4.75	6.40	8.10	13.10
			Cost								
			Price								
	J. D., Finished and Plated all over, with Union		List			3.25	4.25	5.25	7.00	9.25	14.35
			Cost								
			Price								
	Lock and Shield, same Price as Wood Wheel		List								
			Cost								
			Price								
	Rough Body, Finished Trimmings		List			2.25	2.75	3.50	5.00	7.00	11.55
			Cost								
			Price								
JENKINS BROS. CORNER VALVES.	Finished all over		List			2.75	3.25	4.25	5.75	8.00	12.95
			Cost								
			Price								
	Rough Body, Plated Trimmings		List			2.50	3.00	3.85	5.25	7.25	11.85
			Cost								
			Price								
	Rough Body, Plated all over		List			2.75	3.15	4.00	5.50	7.50	12.10
			Cost								
			Price								
	Finished and Plated all over		List			3.15	3.50	4.50	6.00	8.25	13.50
			Cost								
			Price								
JENKINS BROS. WOOD WHEEL,	Rough Body, Finished Trimmings, with Union		List			3.05	3.85	4.75	6.45	8.55	13.85
			Cost								
			Price								
	Finished all over, with Union		List			3.50	4.40	5.30	7.05	9.65	15.25
			Cost								
			Price								
	Rough Body, Plated Trimmings, with Union		List			3.30	4.15	5.15	6.90	8.80	14.15
			Cost								
			Price								
	Rough Body, Plated all over, with Union		List			3.50	4.20	5.25	7.05	8.95	14.45
			Cost								
			Price								
J. S. S. WOOD WHEEL,	Finished and Plated all over, with Union		List			3.55	4.70	5.80	7.70	10.20	15.80
			Cost								
			Price								
	Rough Body, Finished Trimmings		List			1.90	2.60	3.30	4.65	6.00	10.20
			Cost								
			Price								
	Finished all over		List			2.35	3.00	3.75	5.15	6.50	11.55
			Cost								
			Price								
	Plated Trimmings		List			2.05	2.75	3.50	4.85	6.20	10.45
			Cost								
			Price								
J. S. S. WOOD WHEEL,	Rough Body, Plated all over		List			2.20	2.90	3.60	5.00	6.35	10.75
			Cost								
			Price								

CONTINUED ON NEXT PAGE.

STEAM RADIATOR VALVES.

KIND.	Description.	Per Ct. Dis.		SIZE.						
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
J. S. S. WOOD WHEEL, CORNER VALVES.	Finished and Plated all over	List	.....	.....	2.70	3.30	4.10	5.40	6.75	12.35
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished Trimmings, with Union	List	.....	.....	2.50	3.30	4.25	5.90	7.60	12.35
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished all over, with Union	List	.....	.....	2.90	3.70	4.70	6.35	8.20	13.95
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Plated Trimmings, with Union	List	.....	.....	2.45	3.50	4.35	5.95	7.65	12.65
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Rough Body, N.P. all over, with Union	List	.....	.....	2.85	3.65	4.65	6.25	8.10	13.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished and N. P. all over, with Union	List	3.45	4.10	5.25	6.60	8.80	14.60
		Cost
		Price
		List
		Cost
		Price
		List
		Cost
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		List
		Cost
		Price

STEAM RADIATOR VALVES.

KIND.	Description.	Per Ct. Dis.		SIZE.							
				$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
			Cost
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			List								
			Cost
			Price
			List								
			Cost
			Price

HOT WATER RADIATOR VALVES.

KIND.	Description.	Per Ct. Dis.	SIZE.						
			$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2		
DETROIT QUICK OPENING. FEMALE VALVE.	Rough Body, Finished Trimmings	List Cost Price	2.45	3.25	4.50	6.50	10.00		
	Rough Body, Plated all Over	List Cost Price	2.85	3.65	5.05	7.10	10.85		
	Finished Body	List Cost Price	3.00	3.85	5.25	7.50	11.50		
	Finished Body, Plated all Over	List Cost Price	3.40	4.30	5.80	8.10	12.35		
	Rough Body, Finished Trimmings	List Cost Price	1.60	2.25	3.25	4.50	7.00		
	Rough Body, Plated all Over	List Cost Price	1.95	2.65	3.70	5.00	7.75		
	Finished Body	List Cost Price	2.15	2.85	4.00	5.50	8.50		
	Finished Body, Plated all Over	List Cost Price	2.50	3.25	4.45	6.00	9.25		
	Rough Body, Plated Foot Piece	List Cost Price	3.75	4.65	6.25	8.00	12.85		
	Rough Body, Plated all Over	List Cost Price	3.80	4.75	6.40	8.10	13.10		
	Finished and Plated all Over	List Cost Price	4.25	5.25	7.00	9.25	14.35		
	Rough Body, Plated Foot Piece	List Cost Price	2.70	3.50	4.75	6.50	10.75		
LUNKENHEIMER'S IMPROVED FOOT. FEMALE.	Rough Body, Plated all Over	List Cost Price	2.85	3.65	4.90	6.75	11.00		
	Finished and Plated all Over	List Cost Price	3.10	4.00	5.40	7.75	12.25		
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
		List Cost Price	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....

KIND.	Description.	Per Ct. Dis.	SIZE.						
			$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2		
WEBBER WOOD WHEEL UNION VALVES. CLASS B. NOT SELF PACKING.	Rough Body, Finished Trimblings	List	2.45	3.25	4.50	6.50	10.00		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Plated all Over	List	2.85	3.65	5.05	7.10	10.85		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body	List	3.00	3.85	5.25	7.50	11.50		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body, Plated all Over	List	3.40	4.30	5.80	8.10	12.35		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
WEBBER'S WOOD WHEEL. FEMALE, R. & L. COR. & ANGLE GATE.	Rough Body, Finished Trimblings	List	2.45	3.25	4.50	6.50	10.00		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Plated all Over	List	2.85	3.65	5.05	7.10	10.85		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body	List	3.00	3.85	5.25	7.50	11.50		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body, Plated all Over	List	3.40	4.30	5.80	8.10	12.35		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
WEBBER'S WOOD WHEEL. FEMALE, R. & L. COR. & ANGLE GATE.	Rough Body, Finished Trimblings	List	1.60	2.25	3.25	4.50	7.00		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Plated all Over	List	1.95	2.65	3.70	5.00	7.75		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body	List	2.15	2.85	4.00	5.50	8.50		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Finished Body, Plated all Over	List	2.50	3.25	4.45	6.00	9.25		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
WEBBER'S WOOD WHEEL. FEMALE, R. & L. COR. & ANGLE GATE.	Rough Body, Finished Trimblings	List	2.25	3.25	4.40	6.10	9.00		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Plated Trimblings	List	2.40	3.35	4.65	6.30	9.25		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Plated all Over	List	2.55	3.50	4.85	6.50	9.50		
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....

RADIATOR VALVES.

KIND.	Description.	Per Ct.	Dis.	SIZE.							
				1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
		List									
		Cost									
		Price									
		List									
		Cost									
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		Cost									
		Price									

KIND.	Description.	Per Ct. Dis.	SIZE.							
			$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
COMMON.	Brass	List	.85	1.00	1.50	2.00	2.50	3.50	5.00	8.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, without Yoke, Screwed	List					3.00	3.50	4.75	6.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, without Yoke, Flanged	List					4.50	5.50	7.00	9.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, with Yoke, Screwed	List								9.50
JENKINS BROS.		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass	List	1.70	2.00	2.25	2.50	3.25	4.75	6.25	9.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, Screwed	List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, Flanged	List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Lunkenheimer's Patent Regrinding	List		1.00	1.50	2.00	2.70	3.50	5.10	8.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

VALVES.

SIZE.

[illegible]

KIND.	Description.	Per Ct. Dis.	SIZE.							
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
COMMON.	Brass	List	.60	.75	1.00	1.35	1.80	2.80	3.90	5.90
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, without Yoke, Screwed	List	1.40	1.50	1.60	1.75	2.00	2.50	3.50	5.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, without Yoke, Flanged	List			2.25	2.50	3.00	3.75	5.00	6.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Brass Mounted, with Yoke, Screwed	List								8.00
JENKINS BROS.		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass	List	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass Hub, Screwed	List				2.75	2.85	3.85	5.00	7.25
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass Hub, Flanged	List								8.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
LUNKENHEIMER'S.		Price	.....	.....	.....	.....	.....	.....	.....	.....
	With Yoke, Screwed	List								10.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	With Yoke, Flanged	List								11.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	All Iron Globe Valves, Screwed (For Ammonia, Acids, etc.)	List			3.25	3.50	3.75	4.00	4.25	5.25
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
LUNKENHEIMER'S.	All Iron Globe Valves, Flanged (For Ammonia, Acids, etc.)	List			4.10	4.25	4.50	4.75	5.25	6.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, without Yoke, Screwed	List							3.50	5.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Without Yoke, Flanged	List							5.00	6.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, with Yoke, Screwed	List								8.00
LUNKENHEIMER'S.		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, with Yoke, Flanged	List								9.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Patent Regrinding	List	.70	.85	1.15	1.45	2.00	2.80	3.90	6.20
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Patent Regrinding Brass Wheel, Finished all over	List	1.90	2.15	2.50	3.10	3.65	5.25	7.25	10.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

* ANGLE VALVES SAME

ANGLE * VALVES.

SIZE.											
2½	3	3½	4	4½	5	6	7	8	9	10	12
11.75	16.00										
7.50	10.50										
9.50	13.50										
10.50	14.50	18.00	21.00	28.00	32.00	44.00		85.00		135.00	200.00
12.50	17.50	21.50	25.00	32.00	36.00	49.00		91.00		145.00	220.00
15.75	22.00										
11.00	16.00										
13.00	18.00										
12.00	16.75	19.50	24.00	32.00	40.00	48.00	80.00	90.00		130.00	185.00
14.00	18.50	21.50	26.00	34.00	42.00	50.00	80.00	90.00		130.00	185.00
11.00	13.25	15.50	17.50	25.75	27.00	33.25	43.25	52.00			
12.50	14.50	16.75	19.25	27.50	29.00	35.50	46.25	56.25			
7.50	10.50										
9.50	13.50										
10.50	14.50	18.00	21.00	28.00	32.00	44.00					
12.50	17.50	21.50	25.00	32.00	36.00	49.00					
12.00	16.50										
22.00	33.50										

LIST AS GLOBE VALVES.

KIND.	Description.	Per Ct. Dis.		SIZE.							
				$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
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			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
			Cost
			Price
			List								
			Cost
			Price

* ANGLE VALVES SAME

ANGLE* VALVES.

[illegible]

LIST AS GLOBE VALVES.

KIND.	Description.	Per Ct. Dis.	SIZE.							
			$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
JENKINS BROS.	Brass	List			1.50	2.00	2.85	4.00	5.00	7.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass Flanged	List			3.00	4.00	5.00	7.00	9.50	13.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Brass Hose	List					3.30	4.70	5.90	8.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Composition Mounted, Screwed	List								8.00
JENKINS BROS. WITHOUT UNION.		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Composition Mounted, Flanged	List								9.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Sliding Stem and Leaver, Brass	List			2.50	3.20	4.25	5.60	6.80	9.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Sliding Stem and Leaver, Iron B'y, Comp. Mounted, Screwed	List								10.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
JENKINS BROS. WITH MALE OR FEMALE UNION.		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Sliding Stem and Leaver, Iron B'y, Comp. Mounted, Flanged	List								11.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished Trimmings	List			1.75	2.20	3.00	4.10	5.05	7.45
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished all Over	List			3.50	3.95	4.75	5.80	6.80	9.20
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
JENKINS BROS. WITH MALE OR FEMALE UNION.	Nickel Plated Trimmings	List			1.85	2.30	3.15	4.20	5.15	7.55
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Rough Body, N. P. all Over	List			1.95	2.40	3.18	4.25	5.20	7.65
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished, and N. P. all Over	List			3.70	4.15	4.95	6.00	7.00	9.35
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished Trimmings	List			2.60	3.05	3.95	5.30	6.60	9.25
JENKINS BROS. WITH MALE OR FEMALE UNION.		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished all Over	List			4.35	4.40	5.70	7.00	8.35	10.95
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Nickel Plated Trimmings	List			2.70	3.15	4.08	4.95	5.40	9.35
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Rough Body, N. P. all Over	List			2.80	3.28	4.20	5.50	6.85	9.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
JENKINS BROS. WITH MALE OR FEMALE UNION.		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished, and N. P. all Over	List			4.60	5.05	5.95	7.25	8.60	11.25
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

VALVES.

SIZE.											
2½	3	3½	4	4½	5	6	7	8	9	10	12
14.00	20.00										
20.00	28.00										
15.75	22.00										
12.00	15.00	18.00	21.00	29.00	30.00	36.00	50.00	62.00		85.00	120.00
13.00	16.00	19.00	27.50	31.00	32.00	38.00	50.00	62.00		85.00	120.00
16.25	22.50										
14.25	17.50	20.75	24.00		33.25	39.50	53.75	66.00			
15.25	18.50	21.75	25.50		35.25	41.50	53.75	66.00			

KIND.	Description.	Per Ct. Dis.	SIZE.							
					½	¾	1	1¼	1½	2
			List							
			Cost							
			Price							
			List							
			Cost							
			Price							
			List							
			Cost							
			Price							
			List							
			Cost							
			Price							
			List							
			Cost							
			Price							

KIND.	Description.	Per Ct. Dis.	SIZE.							
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
LUNKENHEIMER'S.	Brass	List	1.00	1.00	1.20	1.75	2.50	3.50	5.00	7.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body, Screwed or Flanged Ends	List	.....	.....	.....	.....	.....	.....	.....	10.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Quick Opening, Screwed Ends, Brass	List	.....	.....	.....	.....	4.00	5.00	7.00	10.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Quick Opening, Iron Body, Screwed or Flanged	List	.....	.....	.....	.....	.....	.....	.....	12.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Improved "Handy," Brass Body	List	.....	.....	1.60	1.80	2.50	3.50	5.00	7.50
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Improved "Handy," Iron Body, Brass Trim	List	.....	.....	.....	.....	.....	.....	.....	9.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Improved "Handy," all Iron	List	.....	.....	.....	.....	.....	4.50	6.00	9.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

VALVES. 104412-04 ATMOSIRON

SIZE.

[illegible]

HORIZONTAL, ANGLE, AND

KIND.	Description.	Per Ct. Dis.		SIZE.							
				1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
COMMON.	Brass Screwed	List		.50	.50	.60	.85	1.15	1.55	2.30	3.25
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Brass Flanged	List					3.25	3.75	4.50	6.50	8.50
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body Brass Mounted Screwed	List							1.50	2.25	2.75
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body Brass Mounted Flanged	List							2.50	3.50	4.25
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
JENKINS BROS.	Brass Screwed	List			1.10	1.20	1.30	1.90	2.60	3.60	5.00
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Brass Flanged	List						4.75	5.50	7.80	9.80
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body Screwed	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Iron Body Flanged	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....

* HORIZONTAL, ANGLE, AND VERTICAL CHECK

VERTICAL CHECK VALVES.*

SIZE.

[illegible]

VALVES ARE ALL LISTED THE SAME.

HORIZONTAL, ANGLE, AND

KIND.	Description.	Per Ct.	Dis.	SIZE.								C
				1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....
			List									
			Cost	.....	.....	.....	.....	.....	.....	.....	.....
			Price	.....	.....	.....	.....	.....	.....	.....	.....

* HORIZONTAL, ANGLE, AND VERTICAL CHECK

VERTICAL CHECK VALVES.*

SIZE.

[illegible]

VALVES ARE ALL LISTED THE SAME.

KIND.	Description.	Per Ct. Dis.	SIZE.							
			$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
COMMON.	Brass, Flat or Square Head	List	.70	.70	.75	1.10	1.50	2.25	3.75	4.80
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron, with Brass Plug, Square Head	List		1.00	1.10	1.20	1.60	2.00	2.75	4.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	All Iron, Square Head	List		.70	.75	.80	.90	1.25	1.50	2.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
3 WAY FLAT OR SQUARE HEAD.	Brass	List				1.65	2.25	3.40	5.50	7.00
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Iron, with Brass Plug	List					2.00	2.50	3.25	4.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	All Iron	List					1.30	1.75	2.00	2.75
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List								
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

[illegible]

KIND.	Description.	Per Ct. Dis.	SIZE.							
			$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
COMMON GLOBE.	Brass Screwed	List	2.00	2.00	2.25	2.75	3.50	5.00	7.00	8.50
		Cost								
		Price								
	Brass Flanged	List						9.50	13.50	17.50
JENKINS BROS.		Cost								
		Price								
	Iron Body, Brass Mounted, Screwed	List					2.50	3.50	5.00	6.00
		Cost								
POP.		Price					3.50	5.00	6.75	8.25
	Iron Body, Brass Mounted, Flanged	List								
		Cost								
		Price								
JENKINS BROS.	Brass	List				4.12	4.95	5.50	8.25	10.15
		Cost								
		Price								
	Iron Body, Screwed	List					4.25	4.50	6.25	7.25
POP.		Cost								
		Price								
	Iron Body, Flanged	List								
		Cost								
POP.		Price								
	Lunkenheimer's All Brass, Top or Side Outlet	List			5.50	6.00	6.50	7.50	9.00	11.50
		Cost								
		Price								
POP.	Lunkenheimer's Iron Body, Angle	List								
		Cost								
		Price								
		List								
POP.		Cost								
		Price								
		List								
		Cost								
		Price								

GAUGE

Diameter of Blank Shank. *	Per Ct. Dis.		$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{3}{8}$	
			$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	1	
Compression	List			.95		1.00		1.10		
	Cost									
	Price									
Compression, with Stuffing Box	List			1.10		1.15		1.25		
	Cost									
	Price									
Ball	List			1.00		1.00		1.10		
	Cost									
	Price									
Mississippi	List		.60	.75	1.00	1.25	1.50	2.00	2.50	
	Cost									
	Price									
	List									
	Cost									
	Price									

* REFERS TO

VALVES.

[illegible]

COCKS.

KIND.	Description.	Per Ct.	Dis.	IRON PIPE SIZE.							
						$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$			
JENKINS.	Patent Gauge Cocks, with Cleaner	List				1.50	1.60	1.75			
		Cost									
		Price									
	Patent Gauge Cocks, without Cleaner	List				1.00	1.10	1.30			
		Cost									
		Price									
		List									
		Cost									
		Price									
		List									
		Cost									
		Price									
		List									
		Cost									
		Price									

MISSISSIPPI COCKS.

STEAM, HYDRAULIC, VACUUM,

KIND.	Description.	Per Ct. Dis.		DIAMETER OF DIAL.							
				1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
STEAM.	Bourdon, Brass Case	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Bourdon, Iron Case, Japanned	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
HYDRAULIC.*	Brass Case, with Steel Tube	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Iron Case, with Steel Tube	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
		List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
COMBINATION.	Pressure and Vacuum, Brass Case	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Pressure and Vacuum, Iron Case, Japanned	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Water Pressure and Altitude, Brass Case	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....
	Water Pressure and Altitude, Iron Case, Japanned	List		.....	.....	.....	.....	.....	.....	.....	.....
		Cost		.....	.....	.....	.....	.....	.....	.....	.....
		Price		.....	.....	.....	.....	.....	.....	.....	.....

* \$5.00 EXTRA FOR

DATE _____

MAXIMUM HANDS.

WATER GAUGE GLASSES.

SIZE.	Description.	Per Ct. Dis.	LENGTH OF GLASS.							
			10	11	12	13	14	15	16	17
12-1	Genuine Scotch	List	.40	.40	.45	.45	.50	.55	.60	.65
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-2	Genuine Scotch	List	.40	.40	.45	.45	.50	.55	.60	.65
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-3	Genuine Scotch	List	.55	.55	.55	.55	.60	.60	.65	.70
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
1	Genuine Scotch	List	.90	.90	.90	.90	.90	.90	.90	.95
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-2a	Patent Red Reflecting	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-3	Patent Red Reflecting	List	.40	.40	.45	.45	.50	.55	.60	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-3a	Patent Red Reflecting	List	.40	.40	.45	.45	.50	.55	.60	.65
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-3a	Patent Red Reflecting	List	.55	.55	.55	.55	.60	.60	.65	.70
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
12-4	Patent Red Reflecting	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
1	Patent Red Reflecting	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

WATER GAUGE COCKS AND WASHERS.

KIND.	Description.	Per Ct. Dis.	Glass Sha'k	SIZE.						
			
GAUGE COCKS.	Rough Body, Upper	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Rough Body, Lower	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished, Upper	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Finished, Lower	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Rubber Washers	List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	Per Doz.,	.60	.....	.....	.....	.....

WATER GAUGE GLASSES.

LENGTH OF GLASS.

18	19	20	22	24	30	36	48	60	72		
.70	.75	.80	.90	1.00	1.35	1.70	2.50	3.75	5.40		
.70	.75	.80	.90	1.00	1.35	1.70	2.50	3.75	5.40		
.75	.80	.85	.95	1.05	1.70	2.10	2.95	4.20	5.85		
1.00	1.10	1.25	1.50	2.00	2.95	3.35	5.00	6.70	8.35		
.70	.75	.80	.90	1.00	1.85	2.85					
.75	.80	.85	.95	1.05	2.00	2.50					
				1.50	2.00	2.50					
				2.00	2.60	3.25					

ALTITUDE GAUGES AND HOT WATER THERMOMETERS.

KIND.	Description.	Per Ct. Dis.	PRICE.					
			Each.			Per Doz.		
			List.	Cost.	Price.	List.	Cost.	Price.
ALTITUDE GAUGES.	H and M, 5 Inch Black Dial		3.00			30.00		
HOT WATER THERMOMETERS.	Acme, Straight		2.50			24.00		
	Acme, Angle		3.50			33.00		

STEAM OR WATER GAUGE COLUMNS.

No.	Description.	Length Center to Center.	Size of Boiler Connects.	Per Cent Dis.	PRICE, EACH.					
					*COMPLETE.			BODY ONLY.		
					List.	Cost.	Price.	List.	Cost.	Price.
1		12 In.	$\frac{1}{2}$ In.		15.00			3.00		
2		16 In.	$\frac{3}{4}$ In.		20.00			4.00		
3		19 In.	1 In.		25.00			5.00		

* PRICE COMPLETE INCLUDES CAST IRON COLUMN, STEAM GAUGE, THREE TRY COCKS, AND GLASS GAUGE WITH TWO GUARDS.

WATER GAUGE COCKS. *

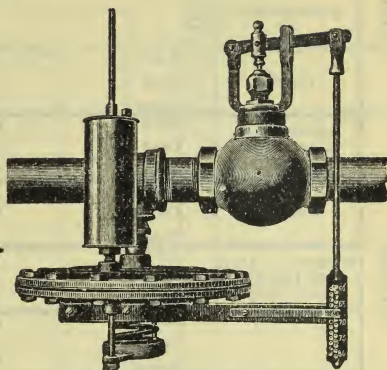
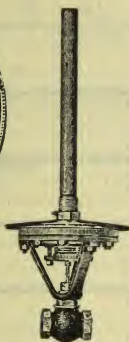
No.	Description.	No. of Gua'ds	Size of Glass.	Threaded to Fit Iron Pipe.	Per Cent Dis.	PRICE, WITH					
						IRON WHEELS.			WOOD WHEELS.		
						List.	Cost.	Price.	List.	Cost.	Price.
	Rough Body.	2	$\frac{1}{2}$ x 10	$\frac{3}{8}$ In.		2.75					
	Rough Body.	2	$\frac{5}{8}$ x 12	$\frac{1}{2}$ In.		3.00			3.75		
	Finished.	2	$\frac{5}{8}$ x 12	$\frac{1}{2}$ In.					4.25		
	Finished.	4	$\frac{5}{8}$ x 12	$\frac{1}{2}$ In.					6.25		
	Finished.	4	$\frac{3}{4}$ x 16	$\frac{3}{4}$ In.					7.50		
	Rubber Washers for Gauge Glasses.	Per Dozen				.60					

* FOR SINGLE GAUGE COCKS SEE PAGE 124.

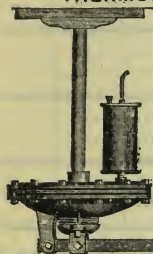
THE POWERS REGULATOR



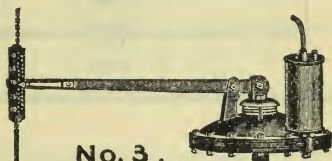
THERMOSTAT.



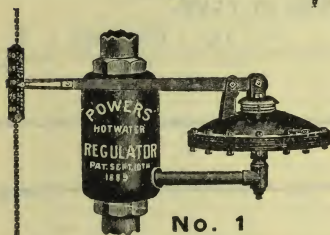
**TANK REGULATOR No. 6. WITH BALANCED VALVE.
No. 8.**



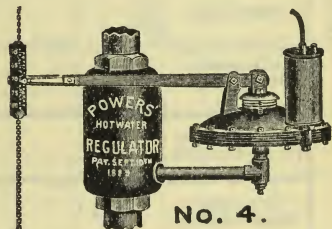
No. 2.



No. 3.



No. 1



No. 4.

...PRICE LIST...

Telegraph Cipher.		LIST.	COST	PRICE.
Agate.	No. 1. Limiting Device only, for Hot Water Heater.	\$25 00		
Atlas.	No. 2. Regulator complete, for Furnace.....	40 00		
Dexter.	No. 3. " " " Steam	45 00		
Unicorn.	No. 4. " " " Hot Water.....	50 00		
Ulster.	Double Lever Attachment, extra.....	2 00		
Valor.	No. 6. Regulator, complete, without Steam Valve..	45 00		
Onyx.	Special Valve for use with natural gas, 1 inch.....	3 00		
Onyx.	" " " " " 1½ inch.....	3 50		
Onyx.	" " " " " 1¾ inch.....	4 50		
Onyx.	" " " " " 2 inch.....	6 00		
Amethyst.	Balanced Valve, 1 inch	5 00		
Amethyst.	" " 1½ inch	6 50		
Amethyst.	" " 1¾ inch.....	8 50		
Amethyst.	" " 2 inch	13 00		

DISCOUNT ON REGULATORS

DISCOUNT ON VALVES

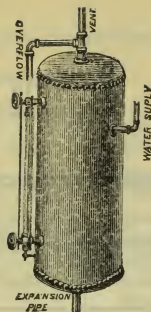
PRESSURE

KIND.	Description.	Per Ct. Dis.		SIZE.						
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
STEAM.	Curtis	List					22.00	28.00	35.00	44.00
		Cost								
		Price								
	Davies No. 1, above 4 Inch Flanged Ends	List					22.00	24.00	25.00	30.00
		Cost								
		Price								
	Muelers	List				10.00	13.00	17.50	24.00	40.00
		Cost								
		Price								
	Watson's, 2 Inch and Larger, Iron Body	List					17.00	22.00	28.00	38.00
		Cost								
		Price								
		List								
		Cost								
		Price								
		List								
		Cost								
		Price								
		List								
		Cost								
		Price								

FLUE BRUSHES

KIND.	Description.	Per Ct. Dis.		SIZE OF FLUE.						
						1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
	Adjustable, Nelson's Expan- sion.	List						1.50		2.00
		Cost								
		Price								
	Boiler Brooms for Underneath	List				Per	Doz.	24.00		
		Cost								
		Price								
	Christoffel, Elliptic Spring	List								2.00
		Cost								
		Price								
	Christoffel, Steel Coil	List							1.00	1.10
		Cost								
		Price								
	Engineers' Favorite	List							2.00	2.00
		Cost								
		Price								
		List								
		Cost								
		Price								
		List								
		Cost								
		Price								

[illegible][illegible]



HOT WATER EXPANSION TANK.

No.	Dimensions in Inches.	Capacity in Gallons.	Length of Gauge in Inches.	Square Feet of Radiation Tank Will Carry.		..... Per Cent Dis. Price.	
						Without Gauge	With Gauge
1	12 x 20	10		200	List	8.00	
					Cost	.....	.....
					Price	.....	.....
2	12 x 24	12		225	List	8.50	
					Cost	.....	.....
					Price	.....	.....
3	12 x 30	15		300	List	9.00	
					Cost	.....	.....
					Price	.....	.....
4	12 x 36	18		400	List	9.50	
					Cost	.....	.....
					Price	.....	.....
5	14 x 30	20		500	List	12.50	
					Cost	.....	.....
					Price	.....	.....
6	14 x 36	24		600	List	13.00	
					Cost	.....	.....
					Price	.....	.....
7	16 x 30	26		700	List	14.00	
					Cost	.....	.....
					Price	.....	.....
8	16 x 36	32		800	List	15.00	
					Cost	.....	.....
					Price	.....	.....
9	16 x 48	42		1,200	List	16.50	
					Cost	.....	.....
					Price	.....	.....
10	18 x 60	66		2,500	List	31.00	
					Cost	.....	.....
					Price	.....	.....
11	20 x 60	82		3,200	List	37.00	
					Cost	.....	.....
					Price	.....	.....
12	22 x 60	100		4,000	List	51.00	
					Cost	.....	.....
					Price	.....	.....
13	24 x 60	120		5,000	List	58.00	
					Cost	.....	.....
					Price	.....	.....

MARBLE.

Description.	Per Cent. Discount.	PRICE PER SQ. FEET.		
		List.	Cost.	Price.
Italian				
Mexican Onyx.				
Tennessee.				
Vermont				

MISCELLANEOUS.

	Quantity.	Per Cent. Discount.	List.	Cost.	Price.
BRONZE.	Automatic Water Feeders Each.		20.00		
	Bronze Liquid Per Gal.				
	Pale Gold Bronze. Per lb.				
	Rich Gold Bronze. Per lb.				
	Silver Bronze. Per lb.				
	Copper Bronze. Per lb.				
	Fire Bronze. Per lb.				
	Crimson Bronze. Per lb.				
	Green Bronze. Per lb.				
	Orange Bronze Per lb.				

PIPE AND BOILER COVERINGS AND COMPOUNDS.

[illegible]

PIPE COVERING

KIND.	Description.	Per Ct.	Dis.	INSIDE DIAMETER OF PIPE.						
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
ASBESTOS SPONGE, FELTED COVERING.	Covering (in Sections 3 Ft. Long), Per Foot	List			.20	.20	.23	.25	.27	.30
		Cost								
		Price								
	Elbows, Each	List			.27	.27	.27	.27	.27	.30
		Cost								
		Price								
	Tees, Each	List			.35	.35	.35	.35	.35	.40
		Cost								
		Price								
	Valves, Each	List			.27	.27	.27	.27	.27	.30
		Cost								
		Price								
ASBESTOS FIREFELT.	Covering, Per Foot	List			.20	.20	.23	.25	.27	.30
		Cost								
		Price								
	Elbows, Each	List			.27	.27	.27	.27	.27	.30
		Cost								
		Price								
	Tees, Each	List			.35	.35	.35	.35	.35	.40
		Cost								
		Price								
	Valves, Each	List			.27	.27	.27	.27	.27	.30
		Cost								
		Price								
ASBESTOS SPONGE, MOULDED COVERING.	Covering, Per Foot	List			.17	.17	.18	.19	.20	.23
		Cost								
		Price								
	Elbows, Each	List			.20	.20	.20	.20	.20	.23
		Cost								
		Price								
	Tees, Each	List			.28	.28	.28	.28	.28	.30
		Cost								
		Price								
	Valves, Each	List			.21	.21	.21	.21	.21	.24
		Cost								
		Price								
FROST PROTECTIVE.	Covering, Per Foot	List			.12	.12	.13	.14	.15	.17
		Cost								
		Price								
	Elbows, Each	List			.15	.15	.15	.15	.15	.17
		Cost								
		Price								
	Tees, Each	List			.21	.21	.21	.21	.21	.23
		Cost								
		Price								
	Valves, Each	List			.16	.16	.16	.16	.16	.18
		Cost								
		Price								
	Asbestos Super- ator Jackets	List			.10	.10	.10	.10	.10	.12
		Cost								
		Price								
		List								
		Cost								
		Price								

AND FITTINGS.

INSIDE DIAMETER OF PIPE.

2½	3	3½	4	4½	5	6	7	8	9	10	
.35	.40	.44	.48	.53	.58	.63	.69	.75	.85	.95	
.35	.40	.45	.50	.60	.69	.82	.95	1.13	1.25	1.40	
.45	.55	.60	.65	.74	.80	.92	1.05	1.25	1.50	1.75	
.45	.55	.60	.65	.74	.80	.92	1.05	1.25	1.50	1.75	
.35	.40	.44	.48	.53	.58	.63	.69	.75	.85	.95	
.35	.40	.45	.50	.60	.69	.82	.95	1.13	1.25	1.40	
.45	.55	.60	.65	.74	.80	.92	1.05	1.25	1.50	1.75	
.45	.55	.60	.65	.74	.80	.92	1.05	1.25	1.50	1.75	
.25	.30	.34	.37	.39	.42	.48	.54	.62	.67	.74	
.25	.30	.34	.37	.39	.42	.48	.54	.62	.67	.74	
.34	.42	.45	.50	.54	.57	.64	.74	.82	.92	1.00	
.34	.42	.45	.50	.54	.57	.64	.74	.82	.92	1.00	
.19	.22	.25	.28	.30	.32	.37	.40	.45	.50	.57	
.19	.22	.25	.28	.30	.32	.37	.40	.45	.50	.57	
.27	.32	.34	.38	.40	.43	.49	.55	.62	.69	.75	
.27	.32	.34	.38	.40	.43	.49	.55	.62	.69	.75	
.13	.15	.17	.18	.19	.20	.21	.23	.25	.27	.30	

PIPE COVERING

KIND.	Description.	Per Ct. Dis.	INSIDE DIAMETER OF PIPE.							
					$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
NATIONAL.	Covering, Per Foot	List	.....	.....	.15	.15	.17	.18	.19	.22
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Elbows, Each	List	.....	.....	.19	.19	.19	.19	.19	.22
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Tees, Each	List	.....	.....	.27	.27	.27	.27	.27	.29
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Valves, Each	List	.....	.....	.20	.20	.20	.20	.20	.23
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
STANDARD.	Covering, Per Foot	List	.....	.....	.17	.17	.18	.19	.20	.23
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Elbows, Each	List	.....	.....	.20	.20	.20	.20	.20	.23
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Tees, Each	List	.....	.....	.28	.28	.28	.28	.28	.30
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
	Valves, Each	List	.....	.....	.21	.21	.21	.21	.21	.24
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....
		List	.....	.....	.....	.....	.....	.....	.....	.....
		Cost	.....	.....	.....	.....	.....	.....	.....	.....
		Price	.....	.....	.....	.....	.....	.....	.....	.....

INSIDE DIAMETER OF PIPE.

137

RADIATORS.

* AMERICAN RADIATORS — PERFECTION, NATIONAL, IDEAL, PEERLESS, AND EXCELSIOR.
BUNDY COLUMBIA, BANNER, FAVORITE, FLEUR-DE-LIS, † GOVE,
HOLLAND, KALAMAZOO, AND ST. LOUIS.

No. Sections.	LENGTH. INCHES.		TAPPED.		HEATING SUR. Sq. Ft.						WIDTH.		
	The American's, Bundy, Banner, Favor- ite, Gove, Holland, Kalamazoo, and St. Louis.	Excelsior Favorite.	One Pipe.	Two Pipe.	48 In. High.	38 In. High.	32 In. High.	26 In. High.	23 In. High.	20 In. High.	Kind.	Across Loop.	Across Feet.
2	5	4 5.2	1	1 x	10	8	6	5	4	4	American.		
3	7½	6 7.8	1	1	15	12	10	8	7	6	Perfection.....	7½	9½
4	10	8 10.4	1	1	20	16	13½	10½	9½	8	National.....	7½	8½
5	12½	10 13.	1	1	25	20	16	13	11	10	Ideal.....	7½	8½
6	15	12 15.6	1½	1	30	24	20	16	14	12	Peerless.....	7½	8½
7	17½	14 18.2	1½	1	35	28	23½	18½	16½	14	Bundy Columbia..	8	9
8	20	16 20.8	1½	1	40	32	26½	21½	18½	16	Excelsior.....	7½	8½
9	22½	18 23.4	1½	1	45	36	30	24	21	18	Favorite.....	7½	9½
10	25	20 26.	1½	1	50	40	33	26	23	20	Fleur-de-Lis.....	7½	9½
11	27½	22 28.6	1½	1½	55	44	36	29	25	22	Gove.....	7½	9½
12	30	24 31.2	1½	1½	60	48	40	32	28	24	Holland.....	7½	9½
13	32½	26 33.8	1½	1½	65	52	43	34	30	26	Kalamazoo.....	7½	8½
14	35	28 36.4	1½	1½	70	56	46	37	32	28	St. Louis.....	7½	9½
15	37½	30 39.	1½	1	75	60	50	40	35	30			
16	40	32 41.6	1½	1½	80	64	53½	42½	37½	32			
17	42½	34 44.2	1½	1½	85	68	56½	45½	39½	34			
18	45	36 46.8	1½	1½	90	72	60	48	42	36			
19	47½	38 49.4	1½	1½	95	76	63½	50½	44	38			
20	50	40 52.	1½	1½	100	80	66½	53½	46	40			
21	52½	42 54.6	1½	1½	105	84	70	56	49	42			
22	55	44 57.2	1½	1½	110	88	73½	58½	51½	44	† Gove, not listed in 23 inch high.		
23	57½	46 59.8	1½	1½	115	92	76½	61½	53½	46			
24	60	48 62.4	1½	1½	120	96	80	64	56	48	There are other radi- ators with same rating and heights as those mentioned above.		
25	62½	50 65.	1½	1½	125	100	83½	66½	58½	50			
26	65	52 67.6	2	1½	130	104	86½	69½	60	52			
27	67½	54 70.2	2	1½	135	108	90	72	63	54			
28	70	56 72.8	2	1½	140	112	93½	74½	65½	56			
29	72½	58 75.4	2	1½	145	116	96½	77½	67½	58			
30	75	60 78.	2	1½	150	120	100	80	70	60			
31	77½	62 80.6	2	1½	155	124	103½	82½	72½	62			

* NATIONAL FOUR COLUMN. AMERICAN. * NATIONAL SINGLE COLUMN.

No. Sec.	Length.	HEATING SURFACE. Sq. FEET.				No. Sec.	Length.	HEATING SURFACE. Sq. FEET.			
		38 In. High.	32 In. High.	26 In. High.	20 In. High.			38 In. High.	32 In. High.	26 In. High.	23 In. High.
2	5	16	13½	10½	8	2	5	6	5	4	3½
3	7½	24	20	16	12	3	7½	9	7½	6	5
4	10	32	26½	21½	16	4	10	12	10	8	6½
5	12½	40	33½	26½	20	5	12½	15	12½	10	8½
6	15	48	40	32	24	6	15	18	15	12	10
7	17½	56	46½	37½	28	7	17½	21	17½	14	11½
8	20	64	53½	42½	32	8	20	24	20	16	13½
9	22½	72	60	48	36	9	22½	27	22½	18	15
10	25	80	66½	53½	40	10	25	30	25	20	16½
11	27½	88	73½	58½	44	11	27½	33	27½	22	18½
12	30	96	80	64	48	12	30	36	30	24	20
13	32½	104	86½	69½	52	13	32½	39	32½	26	21½
14	35	112	93½	74½	56	14	35	42	35	28	23½
15	37½	120	100	80	60	15	37½	45	37½	30	25
16	40	128	106½	85½	64	16	40	48	40	32	26½
17	42½	136	113½	90½	68	17	42½	51	42½	34	28½
18	45	144	120	96	72	18	45	54	45	36	30
19	47½	152	126½	101½	76	19	47½	57	47½	38	31½
20	50	160	133½	106½	80	20	50	60	50	40	33½
21	52½	168	140	112	84	21	52½	63	52½	42	35
22	55	176	146½	117½	88	22	55	66	55	44	36½
23	57½	184	153½	122½	92	23	57½	69	57½	46	38½
24	60	192	160	128	96	24	60	72	60	48	40
25	62½	200	166½	133½	100	25	62½	75	62½	50	41½
						26	65	78	65	52	43½
						27	67½	81	67½	54	45
						28	70	84	70	56	46½
						29	72½	87	72½	58	48½
						30	75	90	75	60	50
						31	77½	93	77½	62	51½

* FOR TAPPING OF AMERICAN RADIATORS SEE
PAGE 140.

RADIATORS.

AMERICAN RADIATOR CO.

DETROIT ORNAMENTAL FLUTED AND PLAIN FLUTED RADIATORS.

DETROIT DINING ROOM RADIATORS.

No. Loops.	Length.	HEATING SURFACE. SQUARE FEET.					No.	Length, Inches.	Heating Sur. Sq. Feet.	Price, Steam.	Price, Water.
		45 In. High.	38 In. High.	31 In. High.	25 In. High.	20 In. High.					
2	4 $\frac{1}{2}$	10 $\frac{1}{2}$	8 $\frac{1}{2}$	7	5 $\frac{1}{2}$	4 $\frac{1}{2}$	1	30 $\frac{1}{2}$	33 $\frac{1}{2}$	\$42.00	\$48.00
3	6 $\frac{1}{8}$	15 $\frac{1}{2}$	13	10 $\frac{1}{2}$	8 $\frac{1}{2}$	6 $\frac{1}{2}$	2	34 $\frac{1}{8}$	42	46.00	52.50
4	9 $\frac{1}{4}$	21	17 $\frac{1}{2}$	14	11	9	3	39 $\frac{1}{4}$	50 $\frac{1}{2}$	50.00	57.00
5	11 $\frac{3}{8}$	26 $\frac{1}{2}$	21 $\frac{3}{4}$	17 $\frac{1}{2}$	13 $\frac{1}{2}$	11 $\frac{1}{2}$	4	43 $\frac{1}{8}$	59 $\frac{1}{2}$	54.00	61.50
6	13 $\frac{1}{2}$	31 $\frac{1}{2}$	26	21	16 $\frac{1}{2}$	13 $\frac{1}{2}$	5	48 $\frac{1}{8}$	68	58.00	66.00
7	16 $\frac{3}{8}$	36 $\frac{3}{4}$	30 $\frac{1}{2}$	24 $\frac{1}{2}$	19 $\frac{1}{2}$	15 $\frac{1}{2}$	6	53 $\frac{3}{8}$	76 $\frac{3}{4}$	62.00	70.50
8	18 $\frac{1}{2}$	42	34 $\frac{3}{4}$	28	22	18	7	57 $\frac{1}{2}$	85 $\frac{1}{2}$	66.00	75.00
9	20 $\frac{1}{2}$	47 $\frac{1}{2}$	39	31 $\frac{1}{2}$	24 $\frac{3}{4}$	20 $\frac{1}{2}$	8	62 $\frac{1}{2}$	94	70.00	79.50
10	23 $\frac{1}{8}$	52 $\frac{1}{2}$	43 $\frac{1}{2}$	35	27 $\frac{1}{2}$	22 $\frac{1}{2}$	9	67 $\frac{1}{2}$	102 $\frac{1}{2}$	74.00	84.00
11	25 $\frac{1}{8}$	57 $\frac{1}{2}$	47 $\frac{1}{2}$	38 $\frac{1}{2}$	30 $\frac{1}{2}$	24 $\frac{1}{2}$	10	71 $\frac{1}{2}$	111 $\frac{1}{2}$	78.00	88.50
12	27 $\frac{1}{2}$	63	52	42	33	27	PERFECTION DINING ROOM RADIATORS.				
13	30 $\frac{1}{2}$	68 $\frac{1}{2}$	56 $\frac{1}{2}$	45 $\frac{1}{2}$	35 $\frac{3}{4}$	29 $\frac{1}{2}$					
14	32 $\frac{1}{2}$	73 $\frac{1}{2}$	60 $\frac{1}{2}$	49	38 $\frac{1}{2}$	31 $\frac{1}{2}$					
15	34 $\frac{1}{2}$	78 $\frac{1}{2}$	65	52 $\frac{1}{2}$	41 $\frac{1}{2}$	33 $\frac{1}{2}$					
16	37	84	69 $\frac{1}{2}$	56	44	36					
17	39 $\frac{1}{2}$	89 $\frac{1}{2}$	73 $\frac{1}{2}$	59 $\frac{1}{2}$	46 $\frac{3}{4}$	38 $\frac{1}{2}$					
18	41 $\frac{1}{2}$	94 $\frac{1}{2}$	78	63	49 $\frac{1}{2}$	40 $\frac{1}{2}$					
19	43 $\frac{1}{2}$	99 $\frac{1}{2}$	82 $\frac{1}{2}$	66 $\frac{1}{2}$	52 $\frac{1}{2}$	42 $\frac{1}{2}$					
20	46 $\frac{1}{2}$	105	86 $\frac{1}{2}$	70	55	45					
21	48 $\frac{1}{2}$	110 $\frac{1}{2}$	91	73 $\frac{1}{2}$	57 $\frac{1}{2}$	47 $\frac{1}{2}$					
22	50 $\frac{1}{2}$	115 $\frac{1}{2}$	95 $\frac{1}{2}$	77	60 $\frac{1}{2}$	49 $\frac{1}{2}$	Number.	Length, Inches.	Heating Sur. Sq. Feet.	Price.	
23	53 $\frac{1}{2}$	120 $\frac{1}{2}$	99 $\frac{1}{2}$	80 $\frac{1}{2}$	63 $\frac{1}{4}$	51 $\frac{1}{4}$					
24	55 $\frac{1}{2}$	126	104	84	66	54	1	35	29	\$48.00	
25	57 $\frac{1}{2}$	131 $\frac{1}{2}$	108 $\frac{1}{2}$	87 $\frac{1}{2}$	68 $\frac{1}{2}$	56 $\frac{1}{2}$	2	40	37	53.00	
26	60 $\frac{1}{2}$	136 $\frac{1}{2}$	112 $\frac{1}{2}$	91	71 $\frac{1}{2}$	58 $\frac{1}{2}$	3	45	45	58.00	
27	62 $\frac{1}{2}$	141 $\frac{1}{2}$	117	94 $\frac{1}{2}$	74 $\frac{1}{4}$	60 $\frac{3}{4}$	4	50	53	63.00	
28	64 $\frac{1}{2}$	147	121 $\frac{1}{2}$	98	77	63	5	55	61	68.00	
29	67 $\frac{1}{2}$	152 $\frac{1}{2}$	125 $\frac{1}{2}$	101 $\frac{1}{2}$	79 $\frac{3}{4}$	65 $\frac{1}{2}$	6	60	69	73.00	
30	69 $\frac{1}{2}$	157 $\frac{1}{2}$	130	105	82 $\frac{1}{2}$	67 $\frac{1}{2}$					
31	71 $\frac{1}{2}$	162 $\frac{1}{2}$	134 $\frac{1}{2}$	108 $\frac{1}{2}$	85 $\frac{1}{4}$	69 $\frac{3}{4}$	7	65	77	78.00	
32	74	168	138 $\frac{1}{2}$	112	88	72					

DETROIT FLUE RADIATOR.

PERFECTION FLUE RADIATOR.

No. Sec.	Length.	HEATING SURFACE. SQUARE FEET.					No. Sec.	Length.	HEATING SURFACE. SQUARE FEET.				
		20 In. High.	18 In. High.	16 In. High.	14 In. High.	13 In. High.			38 In. High.	32 In. High.	26 In. High.	23 In. High.	16, 15, 14 In. High
2	6	12	10 $\frac{1}{2}$	9 $\frac{1}{2}$	8	7 $\frac{1}{2}$	2	6	19	16	12	10	6 $\frac{1}{2}$
3	9	18	16	14	12	11	3	9	28 $\frac{1}{2}$	24	18	15	10
4	12	24	21 $\frac{1}{2}$	18 $\frac{1}{2}$	16	14 $\frac{1}{2}$	4	12	38	32	24	20	13 $\frac{1}{2}$
5	15	30	26 $\frac{1}{2}$	23 $\frac{1}{2}$	20	18 $\frac{1}{2}$	5	15	47 $\frac{1}{2}$	40	30	25	16 $\frac{1}{2}$
6	18	36	32	28	24	22	6	18	57	48	36	30	20
7	21	42	37 $\frac{1}{2}$	32 $\frac{1}{2}$	28	25 $\frac{1}{2}$	7	21	66 $\frac{1}{2}$	56	42	35	23 $\frac{1}{2}$
8	24	48	42 $\frac{1}{2}$	37 $\frac{1}{2}$	32	29 $\frac{1}{2}$	8	24	76	64	48	40	26 $\frac{1}{2}$
9	27	54	48	42	36	33	9	27	85 $\frac{1}{2}$	72	54	45	30
10	30	60	53 $\frac{1}{2}$	46 $\frac{1}{2}$	40	36 $\frac{1}{2}$	10	30	95	80	60	50	33 $\frac{1}{2}$
11	33	66	58 $\frac{1}{2}$	51 $\frac{1}{2}$	44	40 $\frac{1}{2}$	11	33	104 $\frac{1}{2}$	88	66	55	36 $\frac{1}{2}$
12	36	72	64	56	48	44	12	36	114	96	72	60	40
13	39	78	69 $\frac{1}{2}$	60 $\frac{1}{2}$	52	47 $\frac{1}{2}$	13	39	123 $\frac{1}{2}$	104	78	65	43 $\frac{1}{2}$
14	42	84	74 $\frac{1}{2}$	65 $\frac{1}{2}$	56	51 $\frac{1}{2}$	14	42	133	112	84	70	46 $\frac{1}{2}$
15	45	90	80	70	60	55	15	45	142 $\frac{1}{2}$	120	90	75	50
16	48	96	85 $\frac{1}{2}$	74 $\frac{1}{2}$	64	58 $\frac{1}{2}$	16	48	152	128	96	80	53 $\frac{1}{2}$
17	51	102	90 $\frac{1}{2}$	79 $\frac{1}{2}$	68	62 $\frac{1}{2}$	17	51	161 $\frac{1}{2}$	136	102	85	56 $\frac{1}{2}$
18	54	108	96	84	72	66	18	54	171	144	108	90	60
19	57	114	101 $\frac{1}{2}$	88 $\frac{1}{2}$	76	69 $\frac{1}{2}$	19	57	180 $\frac{1}{2}$	152	114	95	63 $\frac{1}{2}$
20	60	120	106 $\frac{1}{2}$	93 $\frac{1}{2}$	80	73 $\frac{1}{2}$	20	60	190	160	120	100	66 $\frac{1}{2}$

FOR TAPPINGS FOR ALL RADIATORS LISTED ON THIS PAGE, SEE PAGE 140.

RADIATORS.

AMERICAN RADIATOR CO.

CIRCULAR OR COLUMN RADIATOR.

EXCELSIOR INDIRECT.

No. Section.	Perfection, for Steam or Water.		Detroit, for Steam or Water.		Ideal.				National, for Steam only.	
	Diam. at Legs. Inches.		Diam. at Legs. Inches.		Steam.		Water.		Diam. at Legs. Inches.	
	Out-side. Inside.		Out-side. Inside.		Out-side. Inside.		Out-side. Inside.		Out-side. Inside.	
12			20 $\frac{3}{4}$	4 $\frac{1}{2}$						
14			22	6						
16	25 $\frac{1}{2}$	6 $\frac{1}{2}$	24	8	22 $\frac{3}{4}$	5 $\frac{3}{4}$	26	9	22 $\frac{3}{4}$	5 $\frac{3}{4}$
18	27	8	25	9						
20	28 $\frac{1}{2}$	9 $\frac{1}{2}$	26	10	25 $\frac{1}{2}$	8 $\frac{1}{2}$	29 $\frac{1}{2}$	12 $\frac{1}{2}$	25 $\frac{1}{2}$	8 $\frac{1}{2}$
22			27	11						
24	32	13	28	12	28 $\frac{1}{2}$	11 $\frac{1}{2}$	33	16	28 $\frac{1}{2}$	11 $\frac{1}{2}$
25					28 $\frac{3}{4}$	11 $\frac{3}{4}$	33 $\frac{3}{4}$	16 $\frac{3}{4}$	28 $\frac{3}{4}$	11 $\frac{3}{4}$
26	32 $\frac{1}{2}$	13 $\frac{1}{2}$	29	13						
28	33 $\frac{1}{2}$	14 $\frac{1}{2}$	30	14	31	14	36 $\frac{1}{2}$	19 $\frac{1}{2}$	31	14
30	33 $\frac{1}{2}$	14 $\frac{1}{2}$	32 $\frac{3}{4}$	16 $\frac{1}{8}$	32 $\frac{1}{4}$	15 $\frac{1}{4}$	38 $\frac{1}{4}$	21 $\frac{1}{4}$	32 $\frac{1}{4}$	15 $\frac{1}{4}$
32			33	17						
33					34 $\frac{1}{2}$	17 $\frac{3}{4}$	40 $\frac{1}{2}$	23 $\frac{3}{4}$	34 $\frac{1}{2}$	17 $\frac{3}{4}$
34	38 $\frac{3}{16}$	19 $\frac{3}{16}$	34	18						
36			37	21	36 $\frac{1}{2}$	19 $\frac{3}{8}$	43 $\frac{1}{2}$	26 $\frac{1}{2}$	36 $\frac{1}{2}$	19 $\frac{3}{8}$
40	41 $\frac{1}{2}$	22 $\frac{1}{2}$								
44	53 $\frac{1}{2}$	24 $\frac{1}{2}$								
46			42 $\frac{1}{4}$	26 $\frac{1}{4}$						
60	55	36								

FOR RADIATION PER SECTION SEE PAGES 138 AND 139.

Length of Sec. . . 3 Ft.
Height of Sec. . . 7 $\frac{1}{2}$ In.
Width of Sec. . . 3 $\frac{1}{4}$ In.
Heating Surface per Sec. 12 Sq. Ft.
(See "Data" below.)

PERFECTION PIN INDIRECT. STANDARD.

Length of Sec. . . 3 Ft.
Height of Sec. . . 7 $\frac{1}{2}$ In.
Height of Sec. at connecting point . 11 $\frac{1}{2}$ In.
Width of Sec. . . . 2 $\frac{3}{4}$ In.
Heating Surface per Sec. 10 Sq. Ft.

EXTRA LARGE.

Length of Sec. . . 3 Ft.
Height of Sec. . . 11 $\frac{1}{2}$ In.
Height of Sec. at connecting point . 15 $\frac{1}{2}$ In.
Width of Sec. . . . 2 $\frac{7}{8}$ In.
Heating Surface per Sec. 15 Sq. Ft.

DATA FOR EXCELSIOR INDIRECT RADIATORS.

Heating Surface.	Cold Air Supply.	Diameter of Duck if Round.	Hot Air Flue.	Size for Brick Work if Hot Air Flues.	Size of Register.	Ratio of 1 to 30.	Ratio of 1 to 35.	Ratio of 1 to 40.
Sq. Feet.	Sq. Inches.	Inches.	Sq. Inches.	Inches.	Inches.	Cubic Feet.	Cubic Feet.	Cubic Feet.
24	36	6.8	48	4 x 12	8 x 8	720	840	960
36	54	8.3	72	8 12	9 12	1080	1260	1440
48	72	9.6	96	8 12	10 14	1440	1680	1920
60	90	10.0	120	12 12	12 15	1800	2100	2400
72	108	11.7	144	12 12	12 19	2160	2520	2880
84	126	12.7	168	12 16	14 22	2520	2940	3360
96	144	13.5	192	12 16	14 24	2880	3360	3840
108	162	14.4	226	12 20	16 20	3240	3780	4320
120	180	15.2	240	12 20	16 24	3600	4200	4800
132	198	15.9	264	12 24	20 20	3960	4620	5280
144	216	16.6	288	12 24	20 24	4320	5040	5760

TAPPINGS.

For all styles of Perfection, Detroit, National, Ideal, Peerless, and Excelsior.

STEAM.

ONE PIPE WORK.

RADIATORS CONTAINING

24 square feet and under 1 Inch.
Above 24, but not exceeding 60 feet, 1 $\frac{1}{2}$ "
Above 60, " " 100 " 1 $\frac{1}{2}$ "
Above 100 square feet " 2 "

TWO PIPE WORK.

RADIATORS CONTAINING

48 square feet and under 1 x $\frac{3}{4}$ Inch.
Above 48, but not exceeding 96 feet 1 $\frac{1}{2}$ 1 "
Above 96 square feet 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ "

HOT WATER.

TAPPED FOR SUPPLY AND RETURN.

Radiators containing 40 square feet and under 1 Inch.
Above 40, but not exceeding 72 square feet 1 $\frac{1}{2}$ "
Above 72 square feet 1 $\frac{1}{2}$ "

Distance from floor to center of opening is 4 $\frac{1}{2}$ inches.

RADIATORS.

BUNDY STANDARD ONE AND TWO ROW RADIATORS.

STEAM. ONE OR TWO ROW.

HOT WATER. ONE OR TWO ROW.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . .	42	3½	\$2.45	\$0.70		45	4	\$3.40	\$0.85	
	36	3	2.25	.75		39	3½	3.15	.90	
	30	2½	2.13	.85		33	3	3.00	1.00	
	24	2	2.00	1.00		27	2½	2.88	1.15	
Enlarged . .	42	4½	2.87	.67½		45	4¾	3.92	.82½	
	36	3¾	2.54	.72½		39	4	3.50	.87½	
	30	3	2.48	.82½		33	3½	3.41	.97½	
	24	2½	2.28	.97½		27	2¾	3.19	1.12½	
Extended Surface . . .	42	4½	2.76	.65		45	4¾	3.80	.80	
	36	3¾	2.45	.70		39	4	3.40	.85	
	30	3	2.40	.80		33	3½	3.33	.95	
	24	2½	2.22	.95		27	2¾	3.12	1.10	

LIST OF DIFFERENT SIZES, GIVING LENGTHS IN INCHES. ONE ROW.*

1x3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24	26
12	15½	18½	21½	25½	28½	31½	34½	38	41½	44½	47½	51	54	60½	66½	73½	79½	86½

TWO ROW.*

2x3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24	26
12	15½	18½	21½	24½	28½	31½	34½	38	41½	44½	47½	50½	54½	60½	66½	73½	79½	86½

BUNDY STANDARD THREE AND FOUR ROW RADIATORS.

STEAM. THREE AND FOUR ROW.

HOT WATER. THREE ROW.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . .	42	3½	\$2.45	\$0.70		45	4	\$3.80	\$0.95	
	36	3	2.25	.75		39	3½	3.50	1.00	
	30	2½	2.13	.85		33	3	3.30	1.10	
	24	2	2.00	1.00		27	2½	3.13	1.25	
Enlarged . .	42	4½	2.87	.67½		45	4¾	4.39	.92½	
	36	3¾	2.54	.72½		39	4	3.90	.97½	
	30	3	2.48	.82½		33	3½	3.76	1.07½	
	24	2½	2.28	.97½		27	2¾	3.47	1.22½	
Extended Surface . . .	42	4½	2.76	.65		45	4¾	4.28	.90	
	36	3¾	2.45	.70		39	4	3.80	.95	
	30	3	2.40	.80		33	3½	3.68	1.05	
	24	2½	2.22	.95		27	2¾	3.40	1.20	

LIST OF SIZES, GIVING LENGTHS IN INCHES. THREE ROW.*

Sizes	3 x 3	4	5	6	7	8	9	10	11	12	13	15
Lengths	12½	15½	18½	22	25½	28½	31½	34½	39	42	45½	51½

FOUR ROW.*

Sizes	4 x 4	5	6	7	8	9	10	12	14	18	20	22	24
Lengths	16½	19½	22½	26½	29½	32	35½	42½	48½	60½	67½	73½	79½

BUNDY CIRCULAR STEAM AND HOT WATER DIRECT RADIATORS.

STEAM.

HOT WATER.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . .	42	3½	\$2.63	\$0.75		45	4	\$3.80	\$0.95	
	36	3	2.40	.80		39	3½	3.50	1.00	
Enlarged . .	42	4½	3.08	.72½		45	4¾	4.39	.92½	
	36	3¾	2.71	.77½		39	4	3.90	.97½	
Extended Surface . . .	42	4½	2.98	.70		45	4¾	4.28	.90	
	36	3¾	2.63	.75		39	4	3.80	.95	

LIST OF SIZES, GIVING DIAMETERS OF BASES IN INCHES.*

Size No. of Loops . .	10	15	20	26	34	50	72
Diameter of Base . .	17½	18½	21½	22½	26½	31½	36

* FOR TAPPINGS SEE NOTE, PAGE 144.

RADIATORS.

BUNDY CIRCULAR STEAM AND HOT WATER DIRECT RADIATOR.

STEAM.

HOT WATER.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . . {	42	3½	\$2.63	\$0.75		45	4	\$3.80	\$0.95	
	36	3	2.40	.80		39	3½	3.50	1.00	
Enlarged . . {	42	4½	3.08	.72½		45	4¾	4.39	.92½	
	36	3½	2.71	.77½		39	4	3.90	.97½	
Extended Surface . . . {	42	4½	2.98	.70		45	4¾	4.28	.90	
	36	3½	2.63	.75		39	4	3.80	.95	

LIST OF SIZES, GIVING DIAMETERS OF BASES IN INCHES.*

Size No. of Loops . .	10	15	20	26	34	50	72
Diameter of Base . .	17¼	18½	21½	22½	26½	31½	36

BUNDY COLUMN STEAM AND HOT WATER DIRECT RADIATOR.

STEAM.

HOT WATER.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . . {	42	3½	\$2.80	\$0.80		45	4	\$4.80	\$1.20	
	36	3	2.55	.85		39	3½	4.38	1.25	
Enlarged . . {	42	4½	3.29	.77½		45	4¾	5.58	1.17½	
	36	3½	2.89	.82½		39	4	4.90	1.22½	
Extended Surface . . . {	42	4½	3.19	.75		45	4¾	5.46	1.15	
	36	3½	2.80	.80		39	4	4.80	1.20	

LIST OF SIZES, GIVING OUTSIDE AND INSIDE DIAMETERS OF BASES IN INCHES.*

	Ste'm	Ste'm	Ste'm	Ste'm	Hot Water
Sizes, No. of Loops	26	34	50	58	50
Outside Diam. Base	26	30	36	41	36
Inside Diam. Base	9	12¾	17	24	17

BUNDY RING COLUMN STEAM RADIATOR.

STEAM.

Styles of Loops.	Hghts. of Rdtrs.	Feet Heatg. Sur. per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . . {	42	3½	\$3.33	\$0.95	
	36	3	3.00	1.00	
Enlarged . . {	42	4½	3.94	.92½	
	36	3½	3.42	.97½	
Extended Surface . . . {	42	4½	3.83	.90	
	36	3½	3.33	.95	

LIST OF SIZES, GIVING INSIDE AND OUTSIDE DIAMETERS OF BASES IN INCHES.*

Size, No. of Loops .	18	22	28	32
Outside Diam. Base	26	30	36	41
Inside Diam. Base .	12	16	22½	28½

LARGE BUNDY CIRCULAR OR COLUMN STEAM DIRECT RADIATOR.*

Made in 1 diameter (57½ inches); in halves to encircle columns 18 inches in diameter; 32 different heights (from 16 inches to 48 inches), and with three distinct styles of loops. [Standard, Enlarged, and Extended Surface.]

STEAM.

Styles of Loops.	Hghts. of Rdtrs.	Feet Heatg. Sur. per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . . {	48	3½	\$2.98	\$0.85	
	42	3	2.70	.90	
Enlarged . . {	48	4½	3.51	.82½	
	42	3½	3.06	.87½	
Extended Surface . . . {	48	4½	3.40	.80	
	42	3½	2.98	.85	

Total number of loops in radiator 142, in outside circle 46. To reduce the amount of heating surface, interior loops to the number of 96 may be omitted, deducting, IN THE 48 INCH RADIATOR, for each Standard loop 3 feet of heating surface and \$2.00 from list price; Enlarged loop 3½ feet and \$2.50; Extended surface loop 3½ feet and \$2.40. IN THE 42 INCH RADIATOR, Standard loop 2½ feet and \$1.70; Enlarged loop 3 feet and \$2.05; Extended loop 3 feet and \$2.00.

The center of feed and return tappings are 7 inches from floor on account of extra high legs, and, when both are on same side, they are 3½ inches apart. The extra high legs, in connection with marble top, which is usually used, makes heights of radiators 48 inches instead of 42 inches — and 42 inches instead of 36 inches. Binder for marble top only is furnished at above prices, marble and iron tops — extra heavy — being charged for extra — prices on application.

* FOR TAPPINGS SEE NOTE, PAGE 144.

RADIATORS.

BUNDY CORNER STEAM AND HOT WATER RADIATOR.

STEAM.

HOT WATER.

Styles of Loops.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.	Hghts. of Rdtrs.	Feet of Heating Surface per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . .	42	3½	\$2.63	\$0.75		45	4	\$3.80	\$0.95	
	36	3	2.40	.80		39	3½	3.50	1.00	
Enlarged . .	42	4½	3.08	.72½		45	4½	4.39	.92½	
	36	3½	2.71	.77½		39	4	3.90	.97½	
Extended Surface . . .	42	4½	2.98	.70		45	4½	4.28	.90	
	36	3½	2.63	.75		39	4	3.80	.95	

LIST OF DIFFERENT SIZES, GIVING RADII IN INCHES.

Sizes, No. Loops	10	15	20
Radii, in Inches	15	17½	19½

Center of tapping 3½ inches from floor and 2 inches from side of Radiator.

LARGE BUNDY CORNER STEAM DIRECT RADIATOR.

Styles of Loops.	Hghts. of Rdtrs.	Feet Heatg. Sur. per Loop.	List Price per Loop.	List Price per Foot.	Cost per Foot.
Standard . .	42	3½	\$2.98	\$0.85	
	36	3	2.70	.90	
Enlarged . .	42	4½	3.51	.82½	
	36	3½	3.06	.87½	
Extended Surface . . .	42	4½	3.40	.80	
	36	3½	2.98	.85	

LIST OF DIFFERENT SIZES, GIVING RADII IN INCHES.

Sizes, No. of Loops	25	28
Radii, Inches	22½	22½

BUNDY RENAISSANCE STEAM DIRECT RADIATOR, WITH CORNER PILLARS. LIST PRICES.

FORTY-THREE INCHES HIGH.*

List of Radiators built on the following size Bases:

Width of Base, 1 Row, 7½ In., 2 Row, 11½ In., 3 Row, 15½ In.

Shape of Radiator.	Number of Loops.	Length of Rad'tors.	STANDARD.		ENLARGED.		STANDARD.		ENLARGED.	
			Heatg. Sur.	With Iron Top or arranged for Marble Top.	Heatg. Sur.	With Iron Top or arranged for Marble Top.	Heatg. Sur.	With Iron Top or arranged for Marble Top.	Heatg. Sur.	With Iron Top or arranged for Marble Top.
1 x 5	5	21½	17½	\$ 36.50	21½	\$ 39.00	15	\$ 34.50	17½	\$ 36.00
1 7	7	28½	24½	43.50	29½	47.00	21	40.75	24½	43.00
1 9	9	34½	31½	50.75	38½	55.00	27	47.25	31½	49.75
1 11	11	41	38½	57.75	46½	63.00	33	53.50	38½	56.75
1 13	13	47½	45½	65.00	55½	71.00	39	60.00	45½	63.50
1 15	15	54	52½	72.00	63½	78.00	45	66.25	52½	70.50
2 5	10	21½	35	58.00	42½	62.75	30	54.25	35	57.00
2 7	14	27½	49	72.00	59½	78.75	42	66.75	49	70.75
2 9	18	34½	63	86.25	76½	94.75	54	79.50	63	84.50
2 11	22	41	77	100.25	93½	110.50	66	92.00	77	98.00
2 13	26	47½	91	114.25	110½	126.50	78	104.50	91	111.75
2 15	30	53½	105	128.25	127½	142.50	90	117.00	100	125.50
3 5	15	21½	52½	79.00	63½	86.00	45	73.25	52½	77.50
3 7	21	28½	73½	100.50	89½	110.50	63	92.50	73½	98.50
3 9	27	34½	94½	120.75	114½	134.50	81	111.50	94½	119.25
3 11	33	42	115½	143.25	140½	159.00	99	130.75	115½	140.25
3 13	39	48½	136½	164.50	165½	183.00	117	149.75	136½	161.00
3 15	45	54½	157½	186.00	191½	207.50	135	169.00	157½	182.00

* FOR TAPPINGS SEE NOTE, PAGE 144.

RADIATORS.

BUNDY RENAISSANCE STEAM DIRECT, WITH CORNER PILLARS.*

THIRTY-ONE INCHES HIGH.

TWENTY-FIVE INCHES HIGH.

Width of Base.	Shape.	No. of Loops.	Length.	STANDARD.		ENLARGED.		STANDARD.		ENLARGED.	
				Htg.	Sur.	Htg.	Sur.	Htg.	Sur.	Htg.	Sur.
1 Row, 7½ In., 2 Row, 11¼ In., 3 Row, 15½ In.	1 x 5	5	21½	12½	\$34.00	15	\$35.75	10	\$33.25	11½	\$34.75
	1 7	7	28½	17½	40.00	21	42.50	14	39.00	16½	41.00
	1 9	9	34½	22½	46.00	27	49.25	18	45.00	21	47.50
	1 11	11	41	27½	52.25	33	56.00	22	50.75	25½	53.75
	1 13	13	47½	32½	58.25	39	62.75	26	56.50	30½	60.25
	1 15	15	54	37½	64.25	45	69.50	30	62.25	35	66.50
	2 5	10	21½	25	53.00	30	56.50	20	51.75	23½	54.50
	2 7	14	27½	35	65.00	42	70.00	28	63.25	32½	67.25
	2 9	18	34½	45	77.00	54	83.50	36	74.75	42	79.75
	2 11	22	41	55	89.25	66	96.75	44	86.50	51½	92.50
	2 13	26	47½	65	101.25	78	110.25	52	98.00	60½	105.00
	2 15	30	53½	75	113.25	90	123.75	60	109.50	70	117.75
	3 5	15	21½	37½	71.50	45	76.75	30	69.50	35	73.75
	3 7	21	28½	52½	89.75	63	97.25	42	87.25	49	93.00
	3 9	27	34½	67½	108.25	81	117.75	54	104.75	63	112.25
	3 11	33	42	82½	126.50	99	138.00	66	122.50	77	131.50
	3 13	39	48½	97½	145.00	117	158.50	78	140.00	91	150.75
	3 15	45	54½	112½	163.25	135	179.00	90	157.75	105	170.00

BUNDY RENAISSANCE HOT WATER DIRECT, WITH CORNER PILLARS.*

FORTY-SIX INCHES HIGH.

FORTY INCHES HIGH.

Width of Base.	Shape.	No. of Loops.	Length.	STANDARD.		ENLARGED.		STANDARD.		ENLARGED.	
				Htg.	Sur.	Htg.	Sur.	Htg.	Sur.	Htg.	Sur.
1 Row, 7½ In., 2 Row, 11¼ In., 3 Row, 15½ In.	1 x 5	5	21½	20	\$41.75	23½	\$44.50	17½	\$39.75	20	\$41.50
	1 7	7	28½	28	51.00	33½	54.75	24½	48.25	28	50.75
	1 9	9	34½	36	60.00	42½	65.00	31½	56.50	36	59.75
	1 11	11	41	44	69.25	52½	75.25	38½	65.00	44	69.00
	1 13	13	47½	52	78.25	61½	85.50	45½	73.25	52	78.00
	1 15	15	54	60	87.50	71½	95.75	52½	81.75	60	87.25
	2 5	10	21½	40	68.50	47½	74.00	35	64.75	40	68.25
	2 7	14	27½	56	86.75	66½	94.00	49	81.50	56	86.50
	2 9	18	34½	72	105.00	85½	114.75	63	98.25	72	104.50
	2 11	22	41	88	123.25	104½	135.25	77	115.00	88	122.75
	2 13	26	47½	104	141.50	123½	155.50	91	131.75	104	140.75
	2 15	30	53½	120	159.75	142½	176.00	105	148.50	120	150.00
	3 5	15	21½	60	117.00	71½	126.00	52½	112.50	60	118.50
	3 7	21	28½	84	139.75	99½	152.25	73½	133.50	84	142.00
	3 9	27	34½	108	162.50	128½	178.75	94½	154.50	108	165.25
	3 11	33	42	132	185.50	156½	205.00	115½	175.50	132	188.75
	3 13	39	48½	156	208.25	185½	231.50	136½	196.50	156	212.00
	3 15	45	54½	180	231.00	213½	258.00	157½	217.50	180	235.50

THIRTY-FOUR INCHES HIGH.

TWENTY-EIGHT INCHES HIGH.

Width of Base.	Shape.	No. of Loops.	Length.	STANDARD.		ENLARGED.		STANDARD.		ENLARGED.	
				Htg.	Sur.	Htg.	Sur.	Htg.	Sur.	Htg.	Sur.
1 Row, 7½ In., 2 Row, 11¼ In., 3 Row, 15½ In.	1 x 5	5	21½	15	\$38.25	17½	\$40.25	12½	\$37.75	14 1-6	\$39.25
	1 7	7	28½	21	46.00	24½	49.00	17½	45.25	19 5-6	47.50
	1 9	9	34½	27	54.00	31½	57.50	22½	52.75	25½	55.75
	1 11	11	41	33	61.75	38½	66.25	27½	60.50	31 1-6	63.75
	1 13	13	47½	39	69.75	45½	74.75	32½	68.00	36 5-6	72.00
	1 15	15	54	45	77.50	52½	83.50	37½	75.50	42½	80.25
	2 5	10	21½	30	61.75	35	65.75	25	60.50	28½	63.50
	2 7	14	27½	42	77.25	49	83.00	35	75.50	39½	79.75
	2 9	18	34½	54	92.75	63	100.25	45	90.50	51	96.00
	2 11	22	41	66	108.50	77	117.25	55	105.75	62½	112.50
	2 13	26	47½	78	124.00	91	134.50	65	120.75	73½	128.75
	2 15	30	53½	90	139.50	105	151.75	75	135.75	85	145.00
	3 5	15	21½	45	109.50	52½	115.00	37½	106.75	42½	111.00
	3 7	21	28½	63	129.25	73½	137.25	52½	125.50	59½	135.50
	3 9	27	34½	81	149.00	94½	159.25	67½	144.25	76½	151.75
	3 11	33	42	99	169.00	115½	181.25	82½	163.00	93½	172.25
	3 13	39	48½	117	188.75	136½	203.25	97½	181.75	110½	192.50
	3 15	45	54½	135	208.50	157½	225.50	112½	200.50	127½	213.00

* NOTE.—Deduct \$7.50 from above prices to get list prices on Renaissance Steam Radiators, same height, without Corner Pillars, as per Figs. 67, 68, and 69.

TAPPING.—Any size, Right or Left Hand, same or opposite sides, or one side only for One Pipe Work. All Regular Steam Goods Tapped 1 x ½ inch Right Hand, same or opposite ends, or one end only for One Pipe Work. Center of Tapping about 4½ inches from floor on account of high legs.

RADIATORS.

BUNDY DINING-ROOM HOT CLOSET STEAM RADIATOR LIST PRICES.*

Forty-Eight Inches High. STEAM. (FIG. 10, Bundy Cat. I.)

STANDARD.			ENLARGED.			EXTENDED SURFACE.		
Feet of Heating Surface.	List Price.	Cost.	Feet of Heating Surface.	List Price.	Cost.	Feet of Heating Surface.	List Price.	Cost.
59	\$ 99.00		70	\$106.00		70	\$104.00	
61	101.00		72½	108.25		72½	106.25	
63	103.00		75	110.50		75	108.50	
65	105.00		77½	112.75		77½	110.75	
67	107.00		80	115.00		80	113.00	
69	109.00		82½	117.25		82½	115.25	
71	111.00		85	119.50		85	117.50	
73	113.00		87½	121.75		87½	119.75	
75	115.00		90	124.00		90	122.00	

Forty-Two Inches High. STEAM. (FIG. 10, Bundy Cat. I.)

44	\$ 94.00		51½	\$100.00		51½	\$ 98.50	
46	96.00		53½	102.60		53½	101.00	
48	98.00		56	104.50		56	103.00	
50	101.00		58½	107.00		58½	105.25	
52	102.00		60½	109.00		60½	107.50	
54	104.00		63	111.00		63	109.75	
56	106.00		65½	113.50		65½	112.00	
58	108.00		67½	116.00		67½	114.75	
60	110.00		70	118.25		70	116.50	

Thirty-Six Inches High. STEAM. (FIG. 10, Bundy Cat. I.)

33	\$ 91.00		38½	\$ 97.25		38½	\$ 96.00	
34½	93.00		40½	99.50		40½	98.00	
36	95.00		42	101.50		42	100.00	
37½	96.75		43½	103.50		43½	102.25	
39	98.50		45½	105.75		45½	104.25	
40½	100.50		47½	108.00		47½	106.50	
42	102.00		49	110.25		49	108.50	
43½	104.00		50½	112.50		50½	110.50	
45	106.00		52½	114.50		52½	112.50	

BUNDY DINING-ROOM HOT CLOSET HOT WATER RADIATOR LIST PRICES.*

Fifty-Three Inches High. HOT WATER. (FIG. 49, Bundy Cat. I.)

STANDARD.			ENLARGED.			EXTENDED SURFACE.		
Feet of Heating Surface.	List Price.	Cost.	Feet of Heating Surface.	List Price.	Cost.	Feet of Heating Surface.	List Price.	Cost.
70	\$137.50		81	\$144.00		81	\$141.00	
72½	140.00		84	147.00		84	144.00	
75	142.50		87	150.00		87	147.00	
77½	145.00		90	153.00		90	150.00	
80	147.50		93	156.00		93	153.00	
82½	150.00		96	159.00		96	156.00	
85	152.50		99	162.00		99	159.00	
87½	155.00		102	165.00		102	162.00	
90	157.50		105	168.00		105	165.00	

Forty-Seven Inches High. HOT WATER. (FIG. 49, Bundy Cat. I.)

63	\$135.25		73½	\$142.00		73½	\$139.75	
64½	137.00		74½	143.75		74½	141.50	
66	138.50		76	145.75		76	143.50	
67½	140.25		77½	147.75		77½	145.50	
69	142.00		78½	149.75		78½	147.50	
70½	143.50		80	151.75		80	149.50	
72	145.00		81½	153.50		81½	151.25	
73½	146.75		82½	155.50		82½	153.25	
75	148.50		84	157.50		84	155.25	

Forty-One Inches High. HOT WATER. (FIG. 49, Bundy Cat. I.)

52	\$132.25		59½	\$139.25		59½	\$137.25	
53	134.00		60½	141.00		60½	139.00	
54	135.50		62	143.00		62	141.00	
55	137.25		63½	145.00		63½	143.00	
56	139.00		64½	147.00		64½	145.00	
57	140.50		66	149.00		66	147.00	
58	142.00		67½	150.75		67½	148.75	
59	143.75		68½	152.75		68½	150.75	
60	145.50		70	154.75		70	152.75	

* NOTE — Add \$7.50 to above prices to get list prices on Dining-Room Hot Closet Radiators, with Ornamental Base and Loops, as per Fig. 50, Bundy Catalogue I. Add \$37.00 to above prices for Standard and Enlarged Loop to get list prices on Dining-Room Hot Closet Radiators, with Ornamental Base and Loops, as per Fig. 51, Bundy Catalogue I. Not made with Extended Surface Loop for Brass Screen. FOR TAPPING, SEE PAGE 144.

RADIATORS.

BUNDY ELITE STEAM AND HOT WATER DIRECT AND DIRECT INDIRECT RADIATOR.

Size and dimensions of Elite Radiators without detachable elbows or legs.

BUNDY PYRO STEAM AND HOT WATER DIRECT RADIATOR.

LIST OF SIZES AND DIMENSIONS.

Number of Sections.	Length in Inches.	OPENINGS.		Sq. Ft. of Heating Surface.								Number of Sections.	Length in Inches.	SIZE OF TAPPING.			Sq. Ft. of Heating Surface.		
		Steam.		Hot Water.	per Sec.									Steam.		Hot Water.			
		1 Pipe.	2 Pipe.		45 In. High 64 Sq. Ft. per Sec.	48 In. High 74 Sq. Ft. per Sec.	51 In. High 84 Sq. Ft. per Sec.	54 In. High 94 Sq. Ft. per Sec.	57 In. High 104 Sq. Ft. per Sec.	60 In. High 114 Sq. Ft. per Sec.	1 Pipe.			2 Pipe.					
1	3	1	1	X	1	X	1	6	5	4	3	2	1	5	1	1	X	1	8
2	6	1	1	1	1	1	1	13	11	9	7	5	4	9	1	1	1	1	16
3	9	1	1	1	1	1	1	20	16	14	11	8	6	13	1	1	1	1	24
4	12	1	1	1	1	1	1	26	22	18	15	11	9	17	1	1	1	1	32
5	15	1	1	1	1	1	1	33	27	23	18	13	10	20	1	1	1	1	40
6	18	1	1	1	1	1	1	40	33	28	22	16	12	24	1	1	1	1	48
7	21	1	1	1	1	1	1	46	38	32	26	19	14	28	1	1	1	1	56
8	24	1	1	1	1	1	1	53	44	37	30	22	16	32	1	1	1	1	64
9	27	1	1	1	1	1	1	60	49	42	33	24	18	35	1	1	1	1	72
10	30	1	1	1	1	1	1	66	55	46	37	27	20	39	1	1	1	1	80
11	33	1	1	1	1	1	1	73	60	51	41	30	22	43	1	1	1	1	88
12	36	1	1	1	1	1	1	80	66	56	45	33	24	47	1	1	1	1	96
13	39	1	1	1	1	1	1	86	71	60	48	35	26	50	1	1	1	1	104
14	42	1	1	1	1	1	1	93	77	65	52	38	28	54	1	1	1	1	112
15	45	1	1	1	1	1	1	100	82	70	56	41	30	58	1	1	1	1	120
16	48	1	1	1	1	1	1	106	88	74	60	44	33	62	1	1	1	1	128
17	51	1	1	1	1	1	1	113	93	79	63	46	35	65	1	1	1	1	136
18	54	1	1	1	1	1	1	120	99	84	67	49	37	69	1	1	1	1	144
19	57	2	1	1	1	1	1	126	104	88	71	52	40	73	2	1	1	1	152
20	60	2	1	1	1	1	1	133	110	93	75	55	42	77	2	1	1	1	160
21	63	2	1	1	1	1	1	140	115	98	78	57	44	80	2	2	1	1	168
22	66	2	1	1	1	1	1	146	121	102	82	60	46	84	2	2	1	1	176
23	69	2	1	1	1	1	1	153	126	107	86	63	48	88	2	2	1	1	184
24	72	2	1	1	1	1	1	160	132	112	90	66	50	92	2	2	1	1	192
25	75	2	1	1	1	1	1	166	137	116	93	68	52						

BUNDY PRINCESS STEAM DIRECT RADIATOR.

LIST OF SIZES AND DIMENSIONS.

BUNDY PYRO WALL STEAM AND HOT WATER DIRECT RADIATOR.

LIST OF SIZES AND DIMENSIONS.

Number of Sections.	Length in Inches.	OPENINGS		Sq. Ft. of Heating Surface.								Number of Sections.	Length in Inches.	SIZE OF TAPPING.				Sq. Ft. per Sec.
		Steam.		45 In. High 9 Sq. Ft. per Sec.	48 In. High 10 Sq. Ft. per Sec.	51 In. High 11 Sq. Ft. per Sec.	54 In. High 12 Sq. Ft. per Sec.	57 In. High 13 Sq. Ft. per Sec.	60 In. High 14 Sq. Ft. per Sec.	Steam.				Hot Water.				
		1 Pipe.	2 Pipe.							1 Pipe.	2 Pipe.							
1	2 1/2	1	1 X	9	7 1/2	6	4 3/4	3 3/4	2 3/4	1	1 1/4	1	1 X	1 X	8			
2	5 1/2	1	1	18	15	12	9 1/2	7 1/2	5 1/2	2	2 1/4	1	1	1	16			
3	8 1/2	1	1	27	22 1/2	18	14 1/4	11	8 1/4	3	3 1/4	1	1	1	24			
4	10 1/2	1	1	36	30	24	19 1/4	14 1/4	11 1/4	4	4 1/4	1	1	1	32			
5	13 1/2	1 1/4	1	45	37 1/2	30	23 3/4	18 1/4	13 1/4	5	5 1/4	1 1/4	1	1	40			
6	16 1/2	1 1/2	1	54	45	36	28 1/2	22	16 1/4	6	6 1/4	1 1/2	1	1	48			
7	18 1/2	1 1/2	1	63	52 1/2	42	33 1/4	25 1/4	18 1/4	7	7 1/4	1 1/2	1	1	56			
8	21 1/2	1 1/2	1	72	60	48	38	29	20 1/4	8	8 1/4	1 1/2	1	1 1/4	64			
9	24 1/2	1 1/2	1 1/4	81	67 1/2	54	42 3/4	33	22 1/4	9	9 1/4	1 1/2	1 1/4	1 1/4	72			
10	26 1/2	1 1/2	1 1/4	90	75	60	47 1/2	36 3/4	24 1/4	10	10 3/4	1 1/2	1	1 1/4	80			
11	29 1/2	1 1/2	1 1/4	99	82 1/2	66	52 1/4	40 3/4	26 1/4	11	11 3/4	1 1/2	1	1 1/4	88			
12	32 1/2	1 1/2	1 1/4	108	90	72	57	44	28 1/4									
13	34 1/2	1 1/2	1 1/4	117	97 1/2	78	61 3/4	47 3/4	30 1/4									
14	37 1/2	1 1/2	1 1/4	126	105	84	66 3/4	51 3/4	32 1/4									
15	40 1/2	1 1/2	1 1/4	135	112 1/2	90	71 1/2	55	34 1/4									
16	43	1 1/2	1 1/4	144	120	96	76	58 3/4	36 1/4									
17	45 1/2	1 1/2	1 1/4	153	127 1/2	102	80 3/4	62 3/4	38 1/4									
18	48 1/2	1 1/2	1 1/4	162	135	108	85 3/4	66	40 1/4									
19	51 1/2	2	1 1/4	171	142 1/2	114	90 3/4	69 3/4	42 1/4									
20	53 1/2	2	1 1/4	180	150	120	95	73 1/2	44 1/4									
21	56 1/2	2	1 1/2	189	157 1/2	126	99 3/4	77	46 1/4									
22	59 1/2	2	1 1/2	198	165	132	104 1/4	80 3/4	48 1/4									
23	61 1/2	2	1 1/2	207	172 1/2	138	109 1/4	84 3/4	50 1/4									
24	64 1/2	2	1 1/2	216	180	144	114	88	52 1/4									
25	67 1/2	2	1 1/2	225	187 1/2	150	118 3/4	91 1/2	54 1/4									
BUNDY DEFIANCE STEAM AND HOT WATER RADIATOR.																		
Size, without legs.	Height in Inches.	Steam.				Hot Water.												
		Ft of Hg'S'ce	List Price per Sec.	List Price per Ft.	List Price per Sec.	List Price per Ft.												
11 in.	18 1/2, 19, 19 1/2	7	\$6.30	\$0.90	\$6.83	\$0.97 1/2												
x	20, 20 1/2, 21																	
18 in.	21 1/2, 22, 22 1/2, 23 and 23 1/2																	
8 in.	13 1/2, 14, 14 1/2	4	\$4.20	\$1.05	\$4.60	\$1.15												
x	15, 15 1/2, 16																	
13 in.	16 1/2, 17, 17 1/2, 18 and 18 1/2																	

BUNDY DEFIANCE STEAM AND HOT WATER RADIATOR.

Size of Section, without legs.	Height of Radiator in Inches.	Steam.			Hot Water.		
		Ft. of Hg S'ce	List Price per Sec.	Net Price per Ft.	List Price per Sec.	Net Price per Ft.	
11 in. X 18 in.	18, 19, 19 1/2, 20, 20 1/2, 21, 21 1/2, 22, 22 1/2, 23 and 23 1/2.	7	\$6.30	\$0.90	\$6.83	\$0.975	
8 in. X 13 in.	13 1/2, 14, 14 1/2, 15, 15 1/2, 16, 16 1/2, 17, 17 1/2, 18 and 18 1/2.	4	\$4.20	\$1.05	\$4.60	\$1.15	

FOR TAPPING SEE PAGE 144.

RADIATORS.

FOWLER RADIATOR CO.

"FOWLER" STEAM AND HOT WATER.

No. of Sections.	Length. Inches.	OPENINGS.			HEATING SURFACE, SQUARE FEET.			
		One Pipe Steam. Inches.	Two Pipe Steam. Inches.	Hot Water. Inches.	Height.		Inches.	
					36	30	24	20
2	5 $\frac{1}{2}$	1 x 0	1 x 0	1 x 1	14	11	8 $\frac{1}{2}$	6 $\frac{1}{2}$
3	8 $\frac{1}{2}$	1 0	1 0	1 1	21	16 $\frac{1}{2}$	12 $\frac{1}{2}$	10
4	10 $\frac{1}{2}$	1 0	1 0	1 1	28	22	17	13 $\frac{1}{2}$
5	13 $\frac{1}{2}$	1 0	1 0	1 1	35	27 $\frac{1}{2}$	21 $\frac{1}{2}$	16 $\frac{1}{2}$
6	16 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 0	1 1	42	33	25 $\frac{1}{2}$	20
7	18 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 0	1 1	49	38 $\frac{1}{2}$	29 $\frac{1}{2}$	23 $\frac{1}{2}$
8	21 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 0	1 1	56	44	34	26 $\frac{3}{4}$
9	24	1 $\frac{1}{2}$ 0	1 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	63	49 $\frac{1}{2}$	38 $\frac{1}{2}$	30
10	26 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	70	55	42 $\frac{1}{2}$	33 $\frac{1}{2}$
11	29 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	77	60 $\frac{1}{2}$	46 $\frac{1}{2}$	36 $\frac{1}{2}$
12	31 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	84	66	51	40
13	34 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	91	71 $\frac{1}{2}$	55 $\frac{1}{2}$	43 $\frac{1}{2}$
14	37 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	98	77	59 $\frac{1}{2}$	46 $\frac{3}{4}$
15	39 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	105	82 $\frac{1}{2}$	63 $\frac{1}{2}$	50
16	42 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	112	88	68	53 $\frac{1}{2}$
17	45	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	119	93 $\frac{1}{2}$	72 $\frac{1}{2}$	56 $\frac{3}{4}$
18	47 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	126	99	76 $\frac{3}{4}$	60
19	50 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	133	104 $\frac{1}{2}$	80 $\frac{1}{2}$	63 $\frac{1}{2}$
20	52 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	140	110	85	66 $\frac{3}{4}$
21	55 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	147	115 $\frac{1}{2}$	89 $\frac{1}{2}$	70
22	58 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	154	121	93 $\frac{1}{2}$	73 $\frac{1}{2}$
23	60 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	161	126 $\frac{1}{2}$	97 $\frac{3}{4}$	76 $\frac{3}{4}$
24	63 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	168	132	102	80
25	66	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	175	137 $\frac{1}{2}$	106 $\frac{1}{2}$	83 $\frac{1}{2}$
26	68 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	182	143	110 $\frac{1}{2}$	86 $\frac{3}{4}$
27	71 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	189	148 $\frac{1}{2}$	114 $\frac{3}{4}$	90
28	73 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	196	154	119	93 $\frac{1}{2}$
29	76 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	203	159 $\frac{1}{2}$	123 $\frac{1}{2}$	96 $\frac{3}{4}$
30	79 $\frac{1}{2}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	210	165	127 $\frac{1}{2}$	100
31	81 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	217	170 $\frac{1}{2}$	131 $\frac{3}{4}$	103 $\frac{1}{2}$
32	84 $\frac{3}{4}$	1 $\frac{1}{2}$ 0	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	224	176	136	106 $\frac{3}{4}$

These dimensions are from outside to outside of tapping bosses; where openings are less than 1 $\frac{1}{2}$ inches, allowance must be made of $\frac{1}{2}$ inch on each end for reducing bushings. Width of radiators, 8 $\frac{1}{2}$ inches. Width of feet of same, 9 $\frac{1}{2}$ inches. Width of base, semi-direct, 10 inches.

GURNEY HEATER CO.

"GURNEY" RADIATOR.						"YALE" QUINTET RADIATOR.						
DESCRIPTION.						DESCRIPTION.						
No. of Sections.	Length. Inches.	Square Feet of Radiating Surface.				No. of Sections.	Length. Inches.	Square Feet of Radiating Surface.				
		39 In. High.	33 In. High.	27 In. High.	21 In. High.			47 In. High 13 Sq. Ft. per Sec.	40 In. High 11 Sq. Ft. per Sec.	33 In. High 9 Sq. Ft. per Sec.	26 In. High 7 Sq. Ft. per Sec.	20 In. High 5 Sq. Ft. per Sec.
2	7½	15	12½	11½	9	2	9	26	22	18	14	10
3	11½	22½	18¾	17½	13½	3	13½	39	33	27	21	15
4	15	30	25	23	18	4	18	52	44	36	28	20
5	18¾	37½	31½	28¾	22½	5	22½	65	55	45	35	25
6	22½	45	37½	34½	27	6	27	78	66	54	42	30
7	26½	52½	43¾	40½	31½	7	31½	91	77	63	49	35
8	30	60	50	46	36	8	36	104	88	72	56	40
9	33¾	67½	56½	51¾	40½	9	40½	117	99	81	63	45
10	37½	75	62½	57½	45	10	45	130	110	90	70	50
11	41½	82½	68¾	63½	49½	11	49½	143	121	99	77	55
12	45	90	75	69	54	12	54	156	132	108	84	60
13	48¾	97½	81½	74¾	58½	13	58½	169	143	117	91	65
14	52½	105	87½	80½	63	14	63	182	154	126	98	70
15	56½	112½	93½	86½	67½	15	67½	195	165	135	105	75
16	60	120	100	92	72	16	72	208	176	144	112	80
17	63¾	127½	106½	97¾	76½	17	76½	221	187	153	119	85
18	67½	135	112½	103½	81	18	81	234	198	162	126	90
19	71½	142½	118¾	109½	85½	19	85½	247	209	171	133	95
20	75	150	125	115	90	20	90	260	220	180	140	100

Width of Section, 9 $\frac{1}{2}$ inches. Width of legs, 11 $\frac{1}{2}$ inches. Thickness of section, 3 $\frac{1}{2}$ inches.

Each section is 9 $\frac{1}{2}$ inches wide. Width at feet, 9 $\frac{1}{2}$ inches. Height from floor to center of openings is 3 $\frac{1}{2}$ inches.

RADIATORS.

JARECKI MANUFACTURING CO.

ERIE, 20 $\frac{1}{2}$ AND 24 INCH.

No. Sec.	Length.	20½ INCHES HIGH.						24 INCHES HIGH.					
		4 Sq. Ft. per Section.		Cost per Sq. Ft. . . .				5 Sq. Ft. per Section.		Cost per Sq. Ft. . . .			
		Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.		Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.	
2	8	1	1 x	1 x 1	8	\$6.80	1	1 x	1 x 1	10	\$7.50		
3	12	1	1	1 1	12	10.20	1	1	1 1	15	11.25		
4	16	1	1	1 1	16	13.60	1	1	1 1	20	15.00		
5	20	1	1	1 1	20	17.00	1	1	1 1	25	18.75		
6	24	1	1	1 1	24	20.40	1	1	1 1	30	22.50		
7	28	1	1	1 1	28	23.80	1½	1	1 1	35	26.25		
8	32	1	1	1 1	32	27.20	1½	1	1 1	40	30.00		
9	36	1½	1	1 1	36	30.60	1½	1	1 1	45	33.75		
10	40	1½	1	1 1	40	34.00	1½	1	1 1	50	37.50		
11	44	1½	1	1 1	44	37.40	1½	1½	1½ 1½	55	41.25		
12	48	1½	1	1 1	48	40.80	1½	1½	1½ 1½	60	45.00		
13	52	1½	1	1½ 1½	52	44.20	1½	1½	1½ 1½	65	48.75		
14	56	1½	1½	1½ 1½	56	47.60	1½	1½	1½ 1½	70	52.50		
15	60	1½	1½	1½ 1½	60	51.00	1½	1½	1½ 1½	75	56.25		
16	64	1½	1½	1½ 1½	64	54.40	1½	1½	1½ 1½	80	60.00		
17	68	1½	1½	1½ 1½	68	57.80	1½	1½	1½ 1½	85	63.75		
18	72	1½	1½	1½ 1½	72	61.20	1½	1½	1½ 1½	90	67.50		

ERIE, 26 $\frac{1}{2}$ AND 32 $\frac{1}{2}$ INCH.

No. Sec.	Length.	26½ INCHES HIGH.						32½ INCHES HIGH.						
		5½ Ft. per Section.		Cost per Sq. Ft. . . .				6½ Sq. Ft. per Section.		Cost per Ft. . . .				
		Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.		Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.		
2 8	1	1	x 3	1	x 1	11	\$7.70	1	1	x 3	1	x 1	13½	\$8.10
3 12	1	1	1	1	1	16½	11.55	1	1	1	1	1	20½	12.15
4 16	1	1	1	1	1	22	15.40	1	1	1	1	1	27	16.20
5 20	1	1	1	1	1	27½	19.25	1½	1	1	1	1	33½	20.25
6 24	1½	1	1	1	1	33	23.10	1½	1	1	1	1	40½	24.30
7 28	1½	1	1	1	1	38½	26.95	1½	1	1	1	1	47½	28.35
8 32	1½	1	1	1	1	44	30.80	1½	1	1	1	1	54	32.40
9 36	1½	1	1	1	1	49½	34.65	1½	1	1½	1½	1½	60½	36.45
10 40	1½	1	1	1½	1½	55	38.50	1½	1	1½	1½	1½	67½	40.50
11 44	1½	1	1	1½	1½	60½	42.35	1½	1	1½	1½	1½	74½	44.55
12 48	1½	1	1	1½	1½	66	46.20	1½	1	1½	1½	1½	81	48.60
13 52	1½	1	1	1½	1½	71½	50.05	1½	1	1½	1½	1½	87½	52.65
14 56	1½	1	1	1½	1½	77	53.90	1½	1	1½	1½	1½	94½	56.70
15 60	1½	1	1	1½	1½	82½	57.75	1½	1½	1½	1½	1½	101½	60.75
16 64	1½	1	1	1½	1½	88	61.60	1½	1½	1½	1½	1½	108	64.80
17 68	1½	1	1	1½	1½	93½	65.45	1½	1½	1½	1½	1½	114½	68.85
18 72	1½	1	1	1½	1½	99	69.30	1½	1½	1½	1½	1½	121½	72.90

ERIE, 38 $\frac{1}{2}$ AND 44 INCH.

No. Sec.	Length.	38½ INCHES HIGH.					44 INCHES HIGH.								
		Cost per Ft.					Cost per Ft.								
		8 Sq. Ft. per Section.	Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.	9½ Sq. Ft. per Section.	Steam—1 Pipe Openings	Steam—2 Pipe Openings	Hot Water.	Heating Surface, Sq. Feet.	Price Complete.		
2 8	1	1	x	1	x 1	16	\$8.80	1	1	x	1	x 1	19½	\$10.63	
3 12	1	1	1	1	1	24	13.20	1	1	1	1	1	29	15.95	
4 16	1	1	1	1	1	32	17.60	1½	1	1	1	1	38½	21.27	
5 20	1½	1	1	1	1	40	22.00	1½	1	1	1	1	48½	26.58	
6 24	1½	1	1	1	1	48	26.40	1½	1½	1	1	1½	58	31.90	
7 28	1½	1	1	1	1½	1½	56	30.80	1½	1½	1	1½	1½	67½	37.22
8 32	1½	1	1	1	1½	1½	64	35.20	1½	1½	1	1½	1½	77½	42.53
9 36	1½	1	1	1	1½	1½	72	39.60	1½	1½	1	1½	1½	87	47.85
10 40	1½	1	1	1	1½	1½	80	44.00	1½	1½	1½	1½	1½	96½	53.17
11 44	1½	1	1	1	1½	1½	88	48.40	1½	1½	1½	1½	1½	106½	58.48
12 48	1½	1	1	1	1½	1½	96	52.80	1½	1½	1½	1½	1½	116	63.80
13 52	1½	1	1	1	1½	1½	104	57.20	1½	1½	1½	1½	1½	125½	69.12
14 56	1½	1	1	1	1½	1½	112	61.60	1½	1½	1½	1½	1½	135½	74.43
15 60	1½	1	1	1	1½	1½	120	66.00	1½	1½	1½	1½	1½	145	79.75
16 64	1½	1	1	1	1½	1½	128	70.40	2	1½	1½	1½	1½	154½	85.07
17 68	1½	1	1	1	1½	1½	136	74.80	2	1½	1½	1½	1½	164½	90.38
18 72	1½	1	1	1	1½	1½	144	79.20	2	1½	1½	1½	1½	174	95.70

ERIE DINING ROOM RADIATORS.

Number		1		2		3		4		5		6	
Number of Sections	Length, inches	4	36	6	52	8	60	10	68	12	76	14	84
Square Feet	P-Price, with Top	37	69	53	81	69	101	83	101	101	117	141	165
Width of section, 84 inches.	Width of legs, 4 inches.	\$53.00	\$73.00	\$63.00	\$83.00	\$73.00	\$93.00	\$83.00	\$103.00	\$93.00	\$113.00	\$133.00	\$153.00
Radiators will be tapped in accordance with the above list, unless otherwise ordered. All openings will have right-hand threads. Height from floor to center of opening is about 43 inches.													

Number of Sections
Length, Inches
Square Feet
Price, with Top
Width of section, 8 $\frac{1}{2}$ inches. Width of legs, 4 inches. Radiators will be tapped in accordance with the above list, unless otherwise ordered. All openings will have right-hand threads. Height from floor to center of opening is about 4 $\frac{1}{2}$ inches.

RADIATORS.

JOY RADIATOR CO.

CRESCENT.							CRESCENT WINDOW.						
No. of Sections.	Length in Inches.	39 Inch Contains 7 Feet per Section.	35 Inch Contains 6 Feet per Section.	30 Inch Contains 5 Feet per Section.	25 Inch Contains 4 Feet per Section.	20 Inch Contains 3 Feet per Section.	No. of Sections.	Length in Inches.	20 Inches in Height Contains 3½ Feet per Section.	18 Inches in Height Contains 5 Feet per Section.	16 Inches in Height Contains 4½ Feet per Section.	14 Inches in Height Contains 4 Feet per Section.	
													HEATING SURFACE.						Sq. Feet of Heating Surface.
2	6	14	12	10	8	6	2	4½	11	10	9	8	
3	9	21	18	15	12	9	3	7½	16½	15	13½	12	
4	12	28	24	20	16	12	4	10½	22	20	18	16	
5	15	35	30	25	20	15	5	13½	27½	25	22½	20	
6	18	42	36	30	24	18	6	16½	33	30	27	24	
7	21	49	42	35	28	21	7	19½	38½	35	31½	28	
8	24	56	48	40	32	24	8	22½	44	40	36	32	
9	27	63	54	45	36	27	9	25½	49½	45	40½	36	
10	30	70	60	50	40	30	10	28½	55	50	45	40	
11	33	77	66	55	44	33	11	31½	60½	55	49½	44	
12	36	84	72	60	48	36	12	34½	66	60	54	48	
13	39	91	78	65	52	39	13	37½	71½	65	58½	52	
14	42	98	84	70	56	42	14	40½	77	70	63	56	
15	45	105	90	75	60	45	15	43½	82½	75	67½	60	
16	48	112	96	80	64	48	16	46	88	80	72	64	
17	51	119	102	85	68	51	17	48½	93½	85	76½	68	
18	54	126	108	90	72	54	18	51½	99	90	81	72	
19	57	133	114	95	76	57	19	54½	104½	95	85½	76	
20	60	140	120	100	80	60	20	57½	110	100	90	80	
21	63	147	126	105	84	63							
22	66	154	132	110	88	66							
23	69	161	138	115	92	69							
24	72	168	144	120	96	72							
25	75	175	150	125	100	75							

ORIENT.						VERTICAL FLUE.					
No. of Sections.	Length in Inches.	45 Inch Contains 6 Feet per Section.	39 Inch Contains 5 Feet per Section.	31 Inch Contains 4 Feet per Section.	24 Inch Contains 3 Feet per Section.	No. of Sections.	Length in Inches.	37 Inch Contains 7 Feet per Section.	31 Inch Contains 5½ Feet per Section.	25 Inch Contains 4½ Feet per Section.	20 Inch Contains 3 Feet per Section.
2	5	12	10	8	6	2	4½	14	11½	9	6
3	7½	18	15	12	9	3	7½	21	17½	13½	9
4	10	24	20	16	12	4	10½	28	23	18	12
5	12½	30	25	20	15	5	12½	35	28½	22½	15
6	15	36	30	24	18	6	15½	42	34½	27	18
7	17½	42	35	28	21	7	18½	49	40½	31½	21
8	20	48	40	32	24	8	20½	56	46	36	24
9	22½	54	45	36	27	9	23½	63	51½	40½	27
10	25	60	50	40	30	10	26½	70	57½	45	30
11	27½	66	55	44	33	11	29	77	63½	49½	33
12	30	72	60	48	36	12	31½	84	69	54	36
13	32½	78	65	52	39	13	34½	91	74½	58½	39
14	35	84	70	56	42	14	37	98	80½	63	42
15	37½	90	75	60	45	15	39½	105	86½	67½	45
16	40	96	80	64	48	16	42½	112	92	72	48
17	42½	102	85	68	51	17	45	119	97½	76½	51
18	45	108	90	72	54	18	47½	126	103½	81	54
19	47½	114	95	76	57	19	50½	133	109½	85½	57
20	50	120	100	80	60	20	53½	140	115	90	60
21	52½	126	105	84	63	21	55½	147	120½	94½	63
22	55	132	110	88	66	22	58½	154	126½	99	66
23	57½	138	115	92	69	23	61½	161	132½	103½	69
24	60	144	120	96	72	24	64	168	138	108	72
25	62½	150	125	100	75	25	66½	175	143½	112½	75

RADIATORS.

PORTER RADIATOR AND IRON CO.

"EFFICIENT" AND "FLEUR-DE-LIS" VERTICAL FLUE, AND "FLEUR-DE-LIS" LOOP RADIATORS.

No. Loops.	Length.			SQUARE FEET OF HEATING SURFACE.							
	Efficient.	"Fleur-de-Lis."		"Efficient," "Fleur-de-Lis," V.F.				"Fleur-de-Lis" Loop			
		Vertical Flue.	Loop.	38 In.	32 In.	26 In.	21 In.	38 In.	32 In.	26 In.	20 In.
2	5½	6½	5½	14	11½	9	6	8	6½	5½	4
3	8	9½	8½	21	17½	13½	9	12	10	8	6
4	10½	13	11	28	23	18	12	16	13½	10½	8
5	13½	16½	13½	35	28½	22½	15	20	16½	16	10
6	16	19½	16½	42	34½	27	18	24	20	18½	12
7	18½	22½	19½	49	40½	31½	21	28	23½	21½	14
8	21½	26	22	56	46	36	24	32	26½	24	16
9	24½	29½	24½	63	51½	40½	27	36	30	26½	18
10	26½	32½	27½	70	57½	45	30	40	33½	29½	20
11	29½	36½	29½	77	63½	49½	33	44	36½	32	22
12	32½	40	32	84	69	54	36	48	40	34½	24
13	35	43½	34½	91	74½	58½	39	52	43½	37½	26
14	37½	46½	37½	98	80½	63	42	56	46½	40	28
15	40½	49½	40	105	86½	67½	45	60	50	42½	30
16	42½	53	42½	112	92	72	48	64	53½	45½	32
17	45½	56½	45½	119	97½	76½	51	68	56½	48	34
18	48½	59½	48½	126	103½	81	54	72	60	50½	36
19	51	62½	51	133	109½	85½	57	76	63½	53½	38
20	53½	66	53½	140	115	90	60	80	66½	56	40
21	56	69½	56½	147	120½	94½	63	84	70	58½	42
22	58½	72½	59½	154	126½	99	66	88	73½	61½	44
23	62	75½	62	161	132½	103½	69	92	76½	64	46
24	54½	78	64½	168	138	108	72	96	80	66½	48
25	67½	81½	67½	175	143½	112½	75	100	83½	69½	50

"EFFICIENT" AND "FLEUR-DE-LIS" V. F. BODY, 8 INCHES WIDE, 9½ INCHES ACROSS THE FEET.

"FLEUR-DE-LIS" LOOP, 7½ INCHES WIDE.

CORRY RADIATOR CO.

HERCULES, GEM, LEADER, AND PEARL RADIATORS.

No. Sec.	Length, Inches.	SQUARE FEET OF HEATING SURFACE.															
		Hercules, Gem, and Leader.										Pearl.					
		Hercules made in 37, 34, 31, 28, 25, 21, and 18 In. High. Gem and Leader made in 44, 37, 31, 25, and 18 In. High.															
		44 In.	37 In.	34 In.	31 In.	28 In.	25 In.	21 In.	18 In.	37 In.	34 In.	31 In.	28 In.	25 In.	21 In.	18 In.	
2	5	17 $\frac{1}{2}$	14 $\frac{1}{2}$	13 $\frac{1}{2}$	12	10 $\frac{1}{2}$	9 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	10 $\frac{1}{2}$	9 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$	
3	8	26	21 $\frac{1}{2}$	20	18	16	14	11 $\frac{1}{2}$	9 $\frac{1}{2}$	16 $\frac{1}{2}$	14 $\frac{1}{2}$	13 $\frac{1}{2}$	11 $\frac{1}{2}$	10 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{1}{2}$	
4	11	34 $\frac{1}{2}$	29	26 $\frac{1}{2}$	24	21 $\frac{1}{2}$	18 $\frac{1}{2}$	15 $\frac{1}{2}$	12 $\frac{1}{2}$	21 $\frac{1}{2}$	19 $\frac{1}{2}$	17 $\frac{1}{2}$	15 $\frac{1}{2}$	13 $\frac{1}{2}$	11 $\frac{1}{2}$	9 $\frac{1}{2}$	
5	14	43 $\frac{1}{2}$	36 $\frac{1}{2}$	33 $\frac{1}{2}$	30	26 $\frac{1}{2}$	23 $\frac{1}{2}$	19 $\frac{1}{2}$	15 $\frac{1}{2}$	27	24	22	19	17	14	12	
6	17	52	43 $\frac{1}{2}$	40	36	32	28	23 $\frac{1}{2}$	19	32 $\frac{1}{2}$	28 $\frac{1}{2}$	26 $\frac{1}{2}$	22 $\frac{1}{2}$	20 $\frac{1}{2}$	16 $\frac{1}{2}$	14 $\frac{1}{2}$	
7	20	60 $\frac{1}{2}$	50 $\frac{1}{2}$	46 $\frac{1}{2}$	42	37 $\frac{1}{2}$	32 $\frac{1}{2}$	27 $\frac{1}{2}$	22 $\frac{1}{2}$	37 $\frac{1}{2}$	33 $\frac{1}{2}$	30 $\frac{1}{2}$	26 $\frac{1}{2}$	23 $\frac{1}{2}$	19 $\frac{1}{2}$	16 $\frac{1}{2}$	
8	23	69 $\frac{1}{2}$	58	53 $\frac{1}{2}$	48	42 $\frac{1}{2}$	37 $\frac{1}{2}$	31	25 $\frac{1}{2}$	43 $\frac{1}{2}$	38 $\frac{1}{2}$	35 $\frac{1}{2}$	30 $\frac{1}{2}$	27 $\frac{1}{2}$	22 $\frac{1}{2}$	19 $\frac{1}{2}$	
9	26	78	65 $\frac{1}{2}$	60	54	48	42	34 $\frac{1}{2}$	28 $\frac{1}{2}$	48 $\frac{1}{2}$	43 $\frac{1}{2}$	39 $\frac{1}{2}$	34 $\frac{1}{2}$	30 $\frac{1}{2}$	25 $\frac{1}{2}$	21 $\frac{1}{2}$	
10	29	86 $\frac{1}{2}$	72 $\frac{1}{2}$	66 $\frac{1}{2}$	60	53 $\frac{1}{2}$	46 $\frac{1}{2}$	38 $\frac{1}{2}$	31 $\frac{1}{2}$	54	48	44	38	34	28	24	
11	32	95 $\frac{1}{2}$	79 $\frac{1}{2}$	73 $\frac{1}{2}$	66	58 $\frac{1}{2}$	51 $\frac{1}{2}$	42 $\frac{1}{2}$	34 $\frac{1}{2}$	59 $\frac{1}{2}$	52 $\frac{1}{2}$	48 $\frac{1}{2}$	41 $\frac{1}{2}$	37 $\frac{1}{2}$	30 $\frac{1}{2}$	26 $\frac{1}{2}$	
12	35	104	87	80	72	64	56	46 $\frac{1}{2}$	38	64 $\frac{1}{2}$	57 $\frac{1}{2}$	52 $\frac{1}{2}$	45 $\frac{1}{2}$	40 $\frac{1}{2}$	33 $\frac{1}{2}$	28 $\frac{1}{2}$	
13	38	112 $\frac{1}{2}$	94 $\frac{1}{2}$	86 $\frac{1}{2}$	78	69 $\frac{1}{2}$	60 $\frac{1}{2}$	50 $\frac{1}{2}$	41 $\frac{1}{2}$	70 $\frac{1}{2}$	62 $\frac{1}{2}$	57 $\frac{1}{2}$	49 $\frac{1}{2}$	44 $\frac{1}{2}$	36 $\frac{1}{2}$	31 $\frac{1}{2}$	
14	41	121 $\frac{1}{2}$	101 $\frac{1}{2}$	93 $\frac{1}{2}$	84	74 $\frac{1}{2}$	65 $\frac{1}{2}$	54 $\frac{1}{2}$	44 $\frac{1}{2}$	75 $\frac{1}{2}$	67 $\frac{1}{2}$	61 $\frac{1}{2}$	53 $\frac{1}{2}$	47 $\frac{1}{2}$	39 $\frac{1}{2}$	33 $\frac{1}{2}$	
15	44	130	108 $\frac{1}{2}$	100	90	80	70	58 $\frac{1}{2}$	47 $\frac{1}{2}$	81	72	66	57	51	42	36	
16	47	138 $\frac{1}{2}$	116	106 $\frac{1}{2}$	96	85 $\frac{1}{2}$	74 $\frac{1}{2}$	62	50 $\frac{1}{2}$	86 $\frac{1}{2}$	76 $\frac{1}{2}$	70 $\frac{1}{2}$	60 $\frac{1}{2}$	54 $\frac{1}{2}$	44 $\frac{1}{2}$	38	
17	50	147 $\frac{1}{2}$	123 $\frac{1}{2}$	113 $\frac{1}{2}$	102	90 $\frac{1}{2}$	79 $\frac{1}{2}$	65 $\frac{1}{2}$	53 $\frac{1}{2}$	91 $\frac{1}{2}$	81 $\frac{1}{2}$	74 $\frac{1}{2}$	64 $\frac{1}{2}$	57 $\frac{1}{2}$	47 $\frac{1}{2}$	40 $\frac{1}{2}$	
18	53	156	130 $\frac{1}{2}$	120	108	96	84	69 $\frac{1}{2}$	57	97 $\frac{1}{2}$	86 $\frac{1}{2}$	79 $\frac{1}{2}$	68 $\frac{1}{2}$	61 $\frac{1}{2}$	50 $\frac{1}{2}$	43 $\frac{1}{2}$	
19	56	164 $\frac{1}{2}$	137 $\frac{1}{2}$	126 $\frac{1}{2}$	114	101 $\frac{1}{2}$	88 $\frac{1}{2}$	73 $\frac{1}{2}$	60 $\frac{1}{2}$	102 $\frac{1}{2}$	91 $\frac{1}{2}$	83 $\frac{1}{2}$	72 $\frac{1}{2}$	64 $\frac{1}{2}$	53 $\frac{1}{2}$	45 $\frac{1}{2}$	
20	59	173 $\frac{1}{2}$	145	133 $\frac{1}{2}$	120	106 $\frac{1}{2}$	93 $\frac{1}{2}$	77 $\frac{1}{2}$	63 $\frac{1}{2}$	108	96	88	76	68	56	48	

RADIATORS.

STANDARD RADIATOR CO.

OLD STYLE.

No. of Sec.	Length	Tapped for			HEATING SURFACE.						NEW STYLE.					
		Water.		Steam.	Square Feet.						4 In.	38 In.	32 In.	20 In.	22 In.	18 In.
		Flow and Ret.	Supply.	Return.	43 1/2 In.	37 1/2 In.	31 1/2 In.	25 1/2 In.	21 1/2 In.							
3	7 1/2	1	1	x	17 1/2	15	12 3/4	10 1/2	8 1/2	12	10	9	7 1/2	6	4 1/2	
4	10	1	1		23	20	17	14	11	18	15	13 1/2	11 1/2	9	6 1/2	
5	12 1/2	1	1		28 3/4	25	21 1/2	17 1/2	13 3/4	24	20	18	15	12	9	
6	15	1	1		34 3/4	30	25 1/2	21	16 3/4	30	25	22 3/4	18 1/2	15	11 1/2	
7	17 1/2	1	1		40 1/4	35	29 3/4	24 1/2	19 1/4	36	30	27	22 3/4	18	13 1/2	
8	20	1	1		46	40	34	28	22	42	35	31 1/2	26 1/4	21	15 1/4	
9	22 1/2	1	1		51 3/4	45	38 1/2	31 1/2	24 3/4	48	40	36	30	24	18	
10	25	1	1		57 1/2	50	42 3/4	35	27 3/4	54	45	40 1/2	33 1/2	27	20 1/2	
11	27 1/2	1 1/4	1 1/4		63 1/4	55	46 1/2	38 1/2	30 1/2	60	50	45	37 3/4	30	22 1/2	
12	30	1 1/4	1 1/4		69	60	51	42	33	66	55	49 1/2	41 1/2	33	24 1/2	
13	32 1/2	1 1/4	1 1/4	1	74 3/4	65	55 1/2	45 1/2	35 3/4	72	60	54	45	36	27	
14	35	1 1/4	1 1/4	1	80 3/4	70	59 1/2	49	38 3/4	78	65	58 1/2	48 1/2	39	29 1/2	
15	37 1/2	1 1/4	1 1/4	1	86 1/4	75	63 3/4	52 1/2	41 1/4	84	70	63	52 1/2	42	31 1/2	
16	40	1 1/4	1 1/4	1	92	80	68	56	44	90	75	67 1/2	56 1/2	45	33 1/2	
17	42 1/2	1 1/4	1 1/4	1	97 3/4	85	72 1/4	59 1/2	46 3/4	96	80	72	60	48	36	
18	45	1 1/4	1 1/4	1	103 1/2	90	76 1/2	63	49 1/2	102	85	76 1/2	63 1/4	51	38 1/4	
19	47 1/2	1 1/4	1 1/4	1	109 1/4	95	80 1/2	66 1/2	52 1/4	108	90	81	67 1/2	54	40 1/2	
20	50	1 1/4	1 1/4	1	115	100	85	70	55	114	95	85 1/2	71 1/2	57	42 1/2	
21	52 1/2	1 1/4	1 1/4	1	120 3/4	105	89 1/2	73 1/2	57 1/2	120	100	90	75	60	45	
22	55	1 1/4	1 1/4	1	126 1/2	110	93 1/2	77	60 1/2	126	105	94 1/2	78 1/2	63	47 1/2	
23	57 1/2	1 1/4	1 1/4	1	132 1/4	115	97 3/4	80 1/2	63 1/4	132	110	99	82 1/2	66	49 1/2	
24	60	1 1/4	1 1/4	1	138	120	102	84	66	138	115	103 1/2	86 1/2	69	51 1/2	
25	62 1/2	1 1/4	1 1/4	1	143 3/4	125	106 1/2	87 1/2	68 3/4	144	120	108	90	72	54	
26	65	1 1/4	1 1/4	1	149 1/2	130	110 1/2	91	71 1/2	150	125	112 1/2	93 1/2	75	56 1/2	
27	67 1/2	1 1/4	1 1/4	1	155 1/4	135	114 3/4	94 1/2	74 1/2	156	130	117	97 1/2	78	58 1/2	
28	70	1 1/4	1 1/4	1	161	140	119	98	77	162	135	121 1/2	101 1/4	81	60 3/4	
29	72 1/2	1 1/4	1 1/4	1	166 3/4	145	123 1/2	101 1/2	79 3/4	168	140	126	105	84	63	
30	75	1 1/4	1 1/4	1	172 1/2	150	127 1/2	105	82 1/2	174	145	130 1/2	108 1/2	87	65 1/2	
31	77 1/2	1 1/2	1 1/2	1						180	150	135	112 1/2	90	67 1/2	
32	80	1 1/2	1 1/2	1						186	155	139 1/2	116 1/2	93	69 1/2	

NEW SINGLE LOOP.

NEW FOUR COLUMN.

No. of Sec.	Length	Tappings.			44 In.	38 In.	32 In.	26 In.	22 In.	18 In.	NEW FOUR COLUMN.					
		1 Pipe Steam.	2 Pipe Steam.	Water.							4 In.	38 In.	32 In.	20 In.	22 In.	18 In.
2	5	1	1	x	7	6	5	4	3	2 1/2	17	14	11 1/2	8 1/2	7	5 1/2
3	7 1/2	1	1		10 1/2	9	7 1/2	6	4 1/2	3 1/2	25 1/2	21	17 1/2	12 1/2	10 1/2	8 1/2
4	10	1	1		14	12	10	8	6	5	34	28	23	17	14	11
5	12 1/2	1	1		17 1/2	15	12 1/2	10	7 1/2	6 1/2	42 1/2	35	28 3/4	21 1/2	17 1/2	13 3/4
6	15	1	1		21	18	15	12	9	7 1/2	51	42	34 1/2	25 1/2	21	16 1/2
7	17 1/2	1	1		24 1/2	21	17 1/2	14	10 1/2	8 1/2	59 1/2	49	40 1/4	29 1/4	24 1/2	19 1/4
8	20	1	1		28	24	20	16	12	10	68	56	46	34	28	22
9	22 1/2	1	1		31 1/2	27	22 1/2	18	13 1/2	11 1/2	76 1/2	63	51 1/2	38 1/2	31 1/2	24 3/4
10	25	1	1		35	30	25	20	15	12 1/2	85	70	57 1/2	42 1/2	35	27 1/2
11	27 1/2	1 1/4	1 1/4	1	38 1/2	33	27 1/2	22	16 1/2	13 1/2	93 1/2	77	63 1/4	46 1/4	38 1/4	30 1/4
12	30	1 1/4	1 1/4	1	42	36	30	24	18	15	102	84	69	51	42	33
13	32 1/2	1 1/4	1 1/4	1	45 1/2	39	32 1/2	26	19 1/2	16 1/2	110 1/2	91	74 1/2	55 1/2	45 1/2	35 1/2
14	35	1 1/4	1 1/4	1	49	42	35	28	21	17 1/2	119	98	80 1/2	59 1/2	49	38 1/2
15	37 1/2	1 1/4	1 1/4	1	52 1/2	45	37 1/2	30	22 1/2	18 1/2	127 1/2	105	86 1/2	63 1/2	52 1/2	41 1/2
16	40	1 1/4	1 1/4	1	56	48	40	32	24	20	136	112	92	68	56	44
17	42 1/2	1 1/4	1 1/4	1	59 1/2	51	42 1/2	34	25 1/2	21 1/2	144 1/2	119	97 1/2	72 1/2	59 1/2	46 1/2
18	45	1 1/4	1 1/4	1	63	54	45	36	27	22 1/2	153	126	103 1/2	76 1/2	63	49 1/2
19	47 1/2	1 1/4	1 1/4	1	66 1/2	57	47 1/2	38	28 1/2	23 1/2	161 1/2	133	109 1/2	80 1/2	66 1/2	52 1/2
20	50	1 1/4	1 1/4	1	70	60	50	40	30	25	170	140	115	85	70	55
21	52 1/2	1 1/4	1 1/4	1	73 1/2	63	52 1/2	42	31 1/2	26 1/2	178 1/2	147	120 1/2	89 1/2	73 1/2	57 1/2
22	55	1 1/2	1 1/2	1 1/4	77	66	55	44	33	27 1/2	187	154	126 1/2	93 1/2	77	60 1/2
23	57 1/2	1 1/2	1 1/2	1 1/4	80 1/2	69	57 1/2	46	34 1/2	28 1/2	195 1/2	161	132 1/2	97 1/2	80 1/2	63 1/2
24	60	1 1/2	1 1/2	1 1/4	84	72	60	48	36	30	204	168	138	102	84	66
25	62 1/2	1 1/2	1 1/2	1 1/4	87 1/2	75	62 1/2	50	37 1/2	31 1/2	212 1/2	175	143 1/2	106 1/2	87 1/2	68 1/2
26	65	1 1/2	1 1/2	1 1/4	91	78	65	52	39	32 1/2	221	182	149 1/2	110 1/2	91	71 1/2
27	67 1/2	1 1/2	1 1/2	1 1/4	94 1/2	81	67 1/2	54	40 1/2	33 1/2	229 1/2	189	155 1/2	114 1/2	94 1/2	74 1/2
28	70	2	1 1/2	1 1/4	98	84	70	56	42	35	238	196	161	119	98	77
29	72 1/2	2	1 1/2	1 1/4	101 1/2	87	72 1/2	58	43 1/2	36 1/2	246 1/2	203	166 1/2	123 1/2	101 1/2	79 1/2
30	75	2	1 1/2	1 1/4	105	90	75	60	45	37 1/2	255	210	172 1/2	127 1/2	105	82 1/2
31	77 1/2	2	1 1/2	1 1/4	108 1/2	93	77 1/2	62	46 1/2	38 1/2	263 1/2	217	178 1/2	131 1/2	108 1/2	85 1/2

STEAM RADIATORS.

"UNION" AND "ROYAL UNION" RADIATORS.

No. Sections.	ft. Length. in.	SQUARE FT. RADIATING SURFACE.					
		37 inches high.	33 inches high.	29 inches high.	25 inches high.	21 inches high.	17 inches high.
3	0	13½	12	10½	9	7½	6
4	1	0	18	14	12	10	8
5	1	3	22½	20	17½	15	10
6	1	6	27	24	21	18	15
7	1	9	31½	28	24½	21	17½
8	2	0	36	32	28	24	20
9	2	3	40½	36	31½	27	22½
10	2	6	45	40	35	30	25
11	2	9	49½	44	38½	33	27½
12	3	0	54	48	42	36	30
13	3	3	58½	52	45½	39	32½
14	3	6	63	56	49	42	35
15	3	9	67½	60	52½	45	37½
16	4	0	72	64	56	48	40
17	4	3	76½	68	59½	51	42½
18	4	6	81	72	63	54	45
19	4	9	85½	76	66½	57	47½
20	5	0	90	80	70	60	50
21	5	3	94½	84	73½	63	52½
22	5	6	99	88	77	66	55
23	5	9	103½	92	80½	69	57½
24	6	0	108	96	84	72	60
25	6	3	112½	100	87½	75	62½
26	6	6	117	104	91	78	65
27	6	9	121½	108	94½	81	67½
28	7	0	126	112	98	84	70
29	7	3	130½	116	101½	87	72½
30	7	6	135	120	105	90	75
List							
Cost							
Price							

"CHAMPION UNION" AND "IMPERIAL UNION" RADIATORS. Imperial Union not made in 45 in. high.

No. Sections.	ft. Length. in.	SQUARE FT. RADIATING SURFACE.					
		45 inches high.	37 inches high.	31 inches high.	25 inches high.	19 inches high.	
3	0	9½	24	19½	16½	13½	10½
4	1	1	32	26	22	18	14
5	1	4½	40	32½	27½	22½	17½
6	1	7½	48	39	33	27	21
7	1	10½	56	45½	38½	31½	24½
8	2	2	64	52	44	36	28
9	2	5½	72	58½	49½	40½	31½
10	2	8½	80	65	55	45	35
11	2	11½	88	71½	60½	49½	38½
12	3	3	96	78	66	54	42
13	3	6½	104	84½	71½	58½	45½
14	3	9½	112	91	77	63	49
15	4	2	120	97½	82½	67½	52½
16	4	4	128	104	88	72	56
17	4	7½	136	110½	93½	76½	59½
18	4	10½	144	117	99	81	63
19	5	1	152	123½	104½	85½	66½
20	5	5	160	130	110	90	70
21	5	8½	168	136½	115½	94½	73½
22	5	11½	176	143	121	99	77
23	6	2½	184	149½	126½	103½	80½
24	6	6	192	156	132	108	84
25	6	9½	200	162½	137½	112½	87½
26	7	1	208	169	143	117	91
27	7	3½	216	175½	148½	121½	94½
28	7	7	224	182	154	126	98
29	7	10½	232	188½	159½	130½	101½
30	8	1½	240	195	165	135	105
List							
Cost							
Price							

SINGLE ROW COLUMNS. "REED" RADIATORS. DOUBLE ROW COLUMNS.

No. of Columns.	Width.	Length.	SQUARE FEET OF RADIATING SURFACE.				Size.	No. of columns.	Width.	Length.	SQUARE FEET OF RADIATING SURFACE.				
			36 inches high.	30 inches high.	24 inches high.	20 inches high.					44 inches high.	36 inches high.	30 inches high.	24 inches high.	20 inches high.
4	7½ ins.	12½ ins.	8	6	5	4	2 x 3	6	12 ins.	11 ins.	15	12	9	7½	6
5	7½ "	14½ "	10	7½	6	5	2 x 4	8	12 "	13 "	20	16	12	10	8
6	7½ "	17 "	12	9	7	6	2 x 5	10	12 "	15½ "	25	20	15	12½	10
7	7½ "	19½ "	14	10½	8	7	2 x 6	12	12 "	17½ "	30	24	18	15	12
8	7½ "	21½ "	16	12	10	8	2 x 7	14	12 "	20 "	35	28	21	17½	14
9	7½ "	23½ "	18	13½	11	9	2 x 8	16	12 "	22 "	40	32	24	20	16
10	7½ "	26 "	20	15	12	10	2 x 9	18	12 "	24½ "	45	36	27	22½	18
12	7½ "	30½ "	24	18	15	12	2 x 10	20	12 "	26½ "	50	40	30	25	20
14	7½ "	35 "	28	21	17	14	2 x 11	22	12 "	28 "	55	44	33	27½	22
16	7½ "	39½ "	32	24	20	16	2 x 12	24	12 "	31½ "	60	48	36	30	24
18	7½ "	44 "	36	27	22	18	2 x 13	26	12 "	33½ "	65	52	39	32½	26
22	7½ "	48½ "	40	30	24	20	2 x 14	28	12 "	35½ "	70	56	42	35	28
28	7½ "	53 "	44	33	27½	22	2 x 15	30	12 "	37½ "	75	60	45	37½	30
24	7½ "	57½ "	48	36	30	24	2 x 16	32	12 "	40 "	80	64	48	40	32
							2 x 17	34	12 "	42 "	85	68	51	42½	34
							2 x 18	36	12 "	44½ "	90	72	54	45	36
							2 x 20	40	12 "	49 "	100	80	60	50	40
							2 x 22	44	12 "	53 "	110	88	66	55	44
							2 x 25	50	12 "	59½ "	125	100	75	62½	50
							2 x 28	56	12 "	66½ "	140	112	84	70	56
							2 x 31	62	12 "	73½ "	155	124	93	72½	62
Hight			44	36	24	20									
List															
Cost															
Price															

COST PRICES OF RADIATION.

The majority of the heating trade prefer to handle only one or two lines of radiators, and for this reason it is thought best to list only a few makes, on account of the space a larger number would occupy. Therefore, only a few are listed, and blank spaces are left sufficient for any others the fitter may handle.

COST PRICE OF RADIATION.

[illegible]

COST PRICE OF RADIATION.

[illegible]

COST PRICE OF RADIATION.

[illegible]

COST PRICE OF RADIATION.

[illegible]

COST PRICE OF RADIATION.

[illegible]

COST PRICE OF RADIATION.

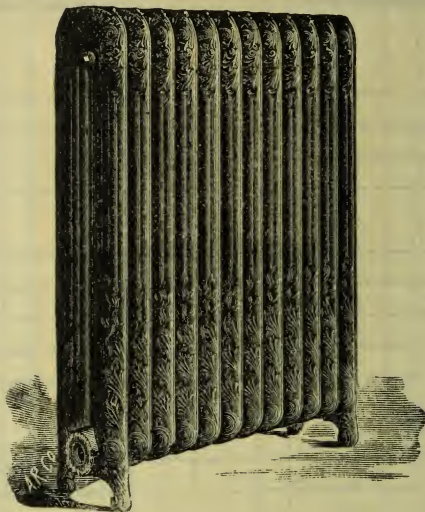
[illegible]

COST PRICE OF RADIATION.

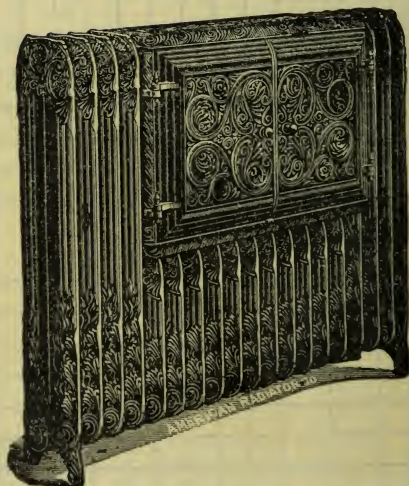
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RADIATORS.

AMERICAN RADIATORS.



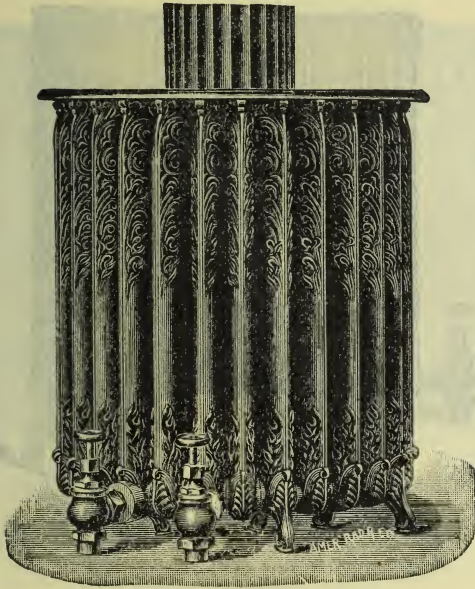
Detroit.



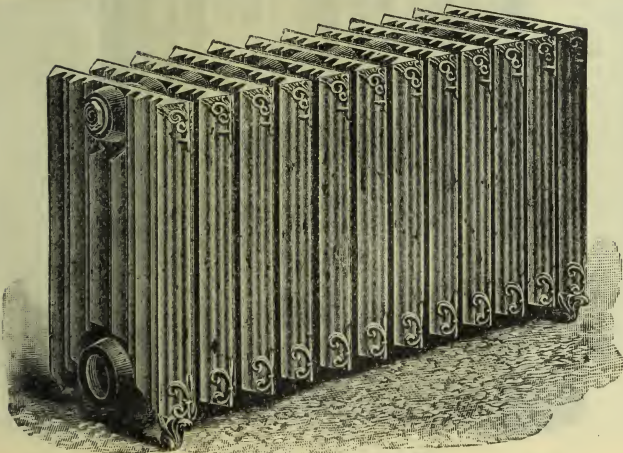
Detroit Dining Room.

RADIATORS.

AMERICAN RADIATORS.



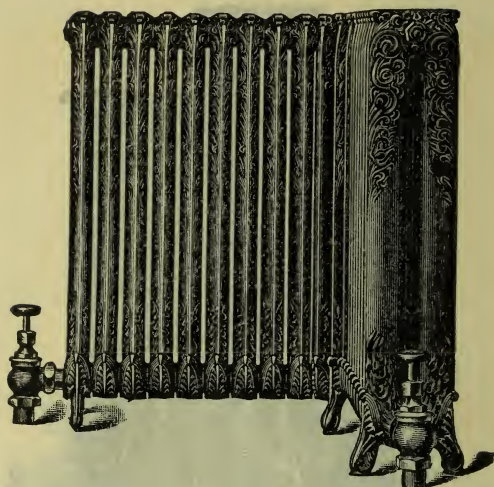
Perfection Column.



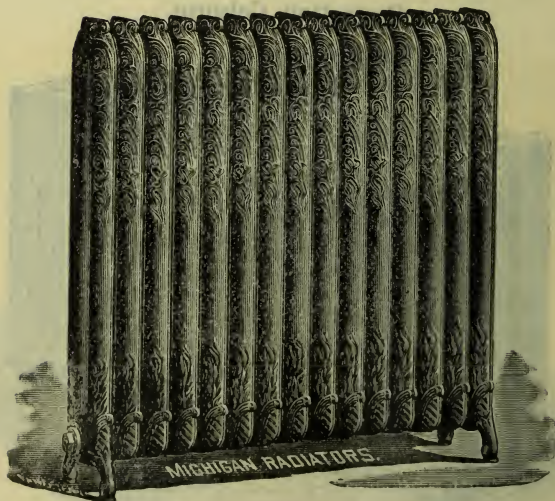
Detroit Flue.

RADIATORS.

AMERICAN RADIATORS.



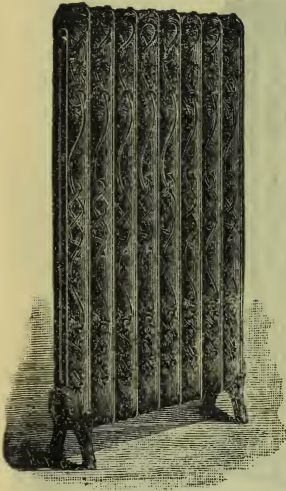
Perfection Corner (Hot Water).



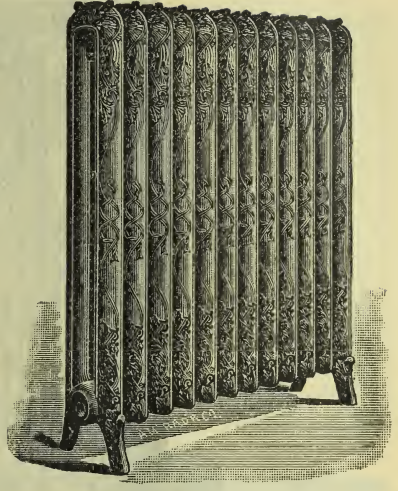
Perfection (Steam).

RADIATORS.

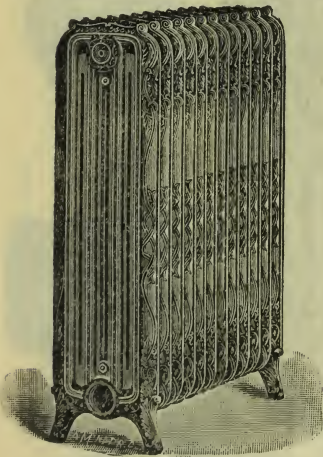
AMERICAN RADIATORS.



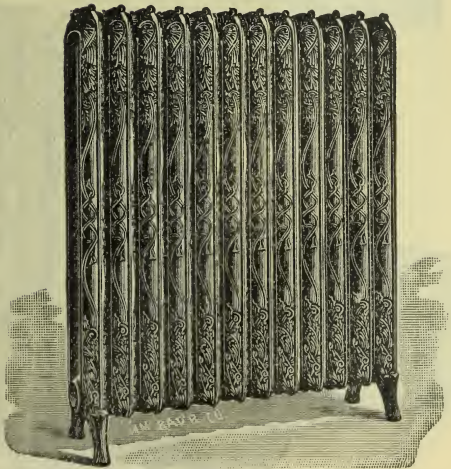
National Single Column.



National Steam.



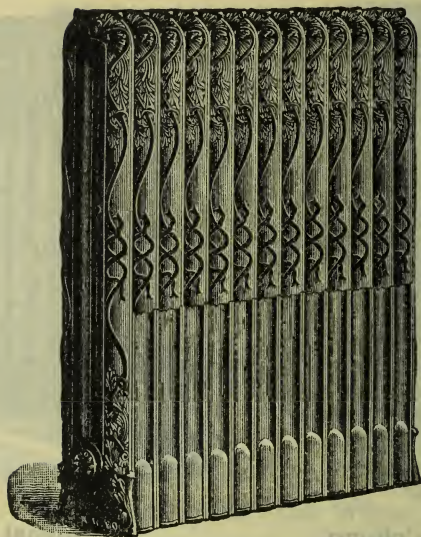
National Four Column.



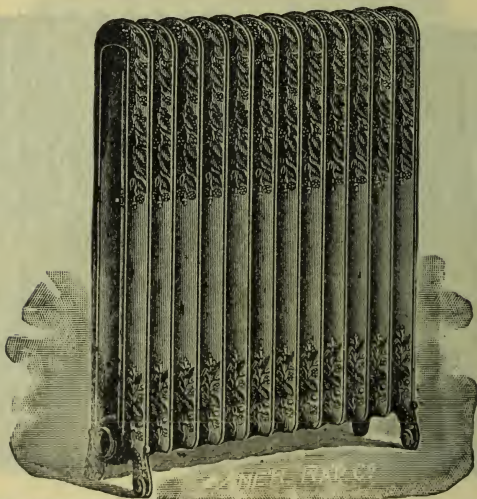
National Hot Water.

RADIATORS.

AMERICAN RADIATORS.

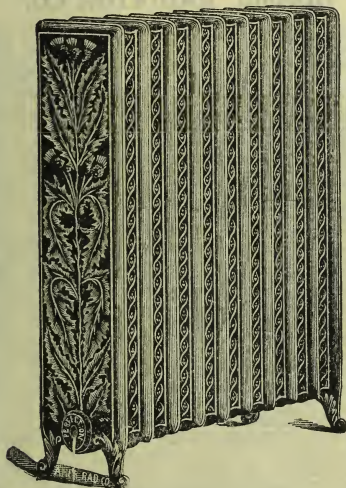


National Direct Indirect (Steam).

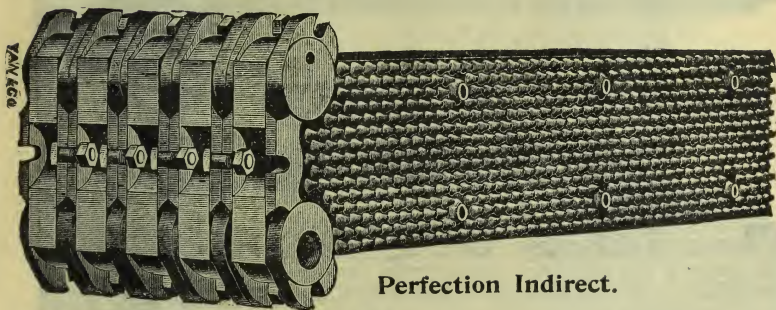


Ideal (Steam).

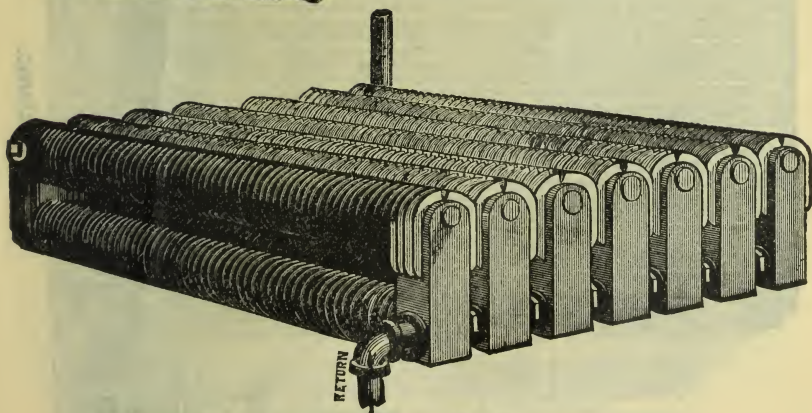
RADIATORS. AMERICAN RADIATORS.



Perfection Flue.

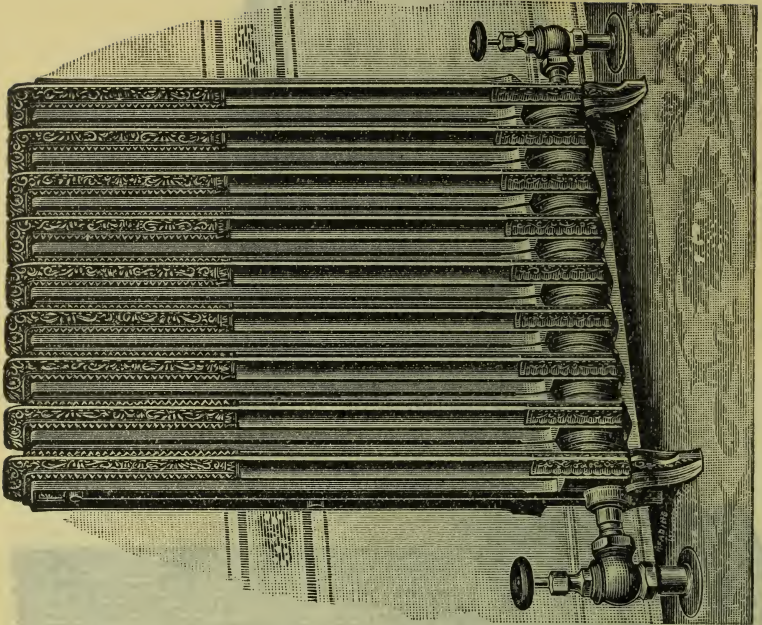


Perfection Indirect.

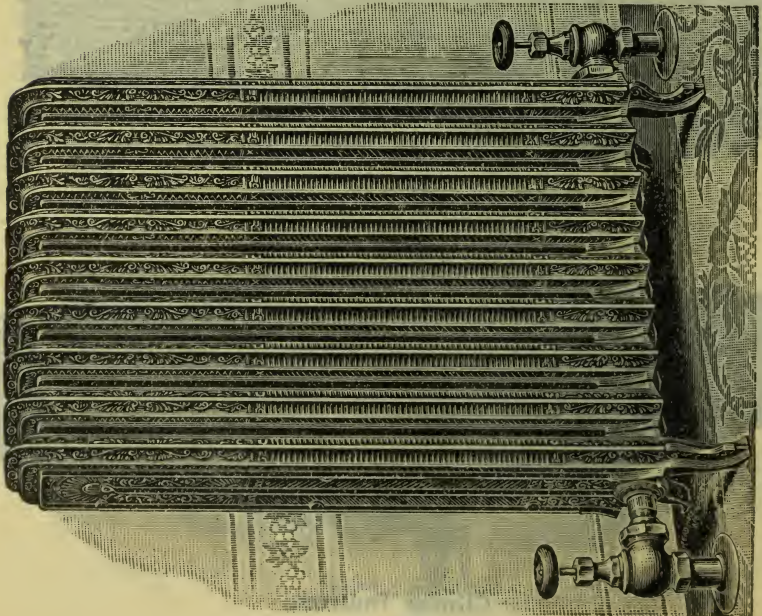


Climax Indirect.

RADIATORS.
ADAMS RADIATOR CO.



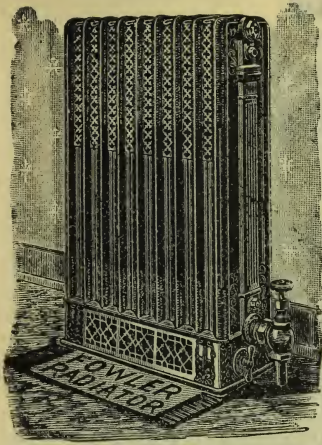
Electric.




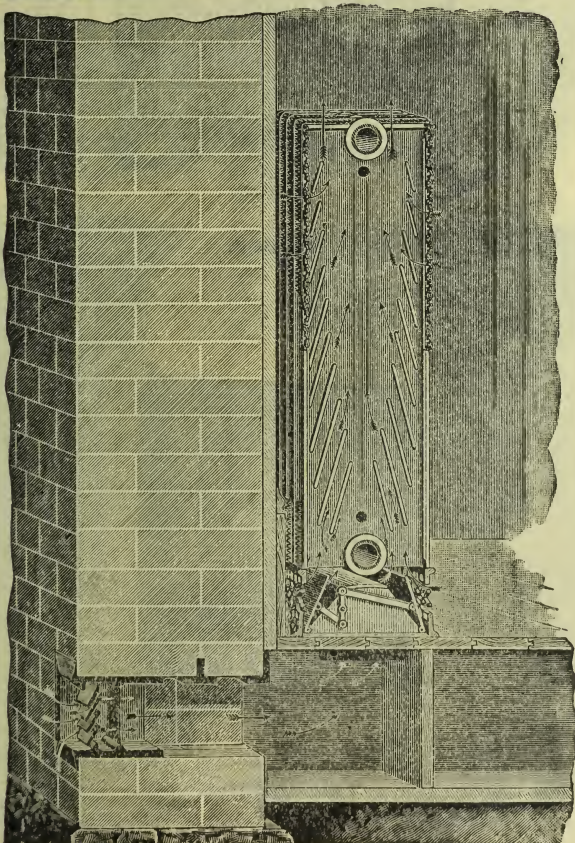
Cyclonic.

RADIATORS.

FOWLER RADIATOR CO.



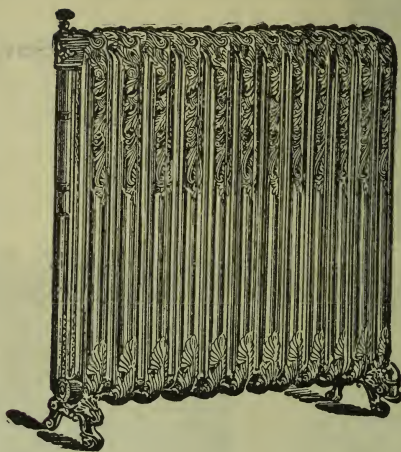
 **Fowler Semi-Direct.**



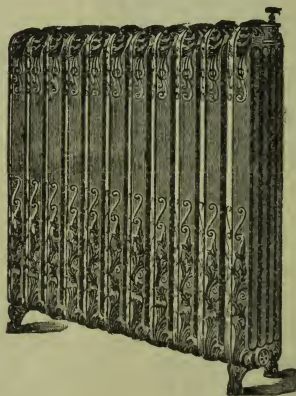
Fowler Semi-Direct (Showing Air Passages)

RADIATORS.

GURNEY MFG. CO.



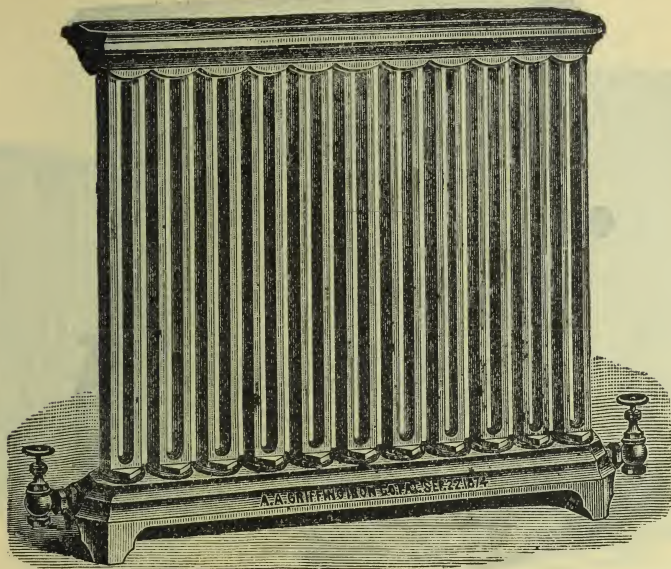
Gurney.



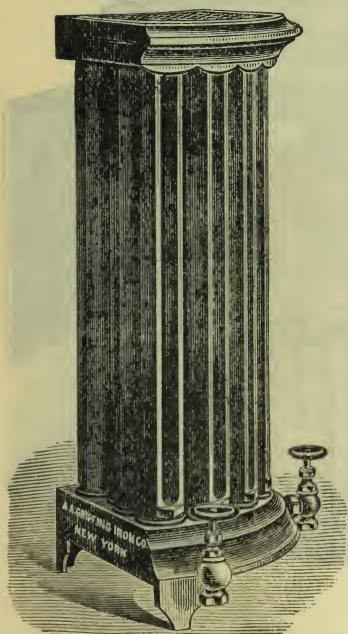
Yale Quintet.

RADIATORS.

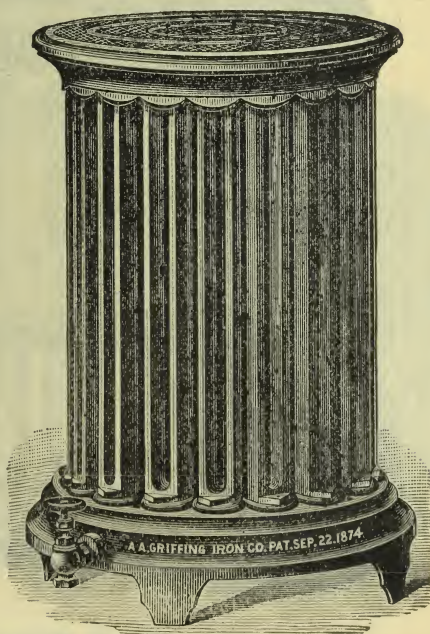
A. A. GRIFFIN IRON CO.



Bundy.

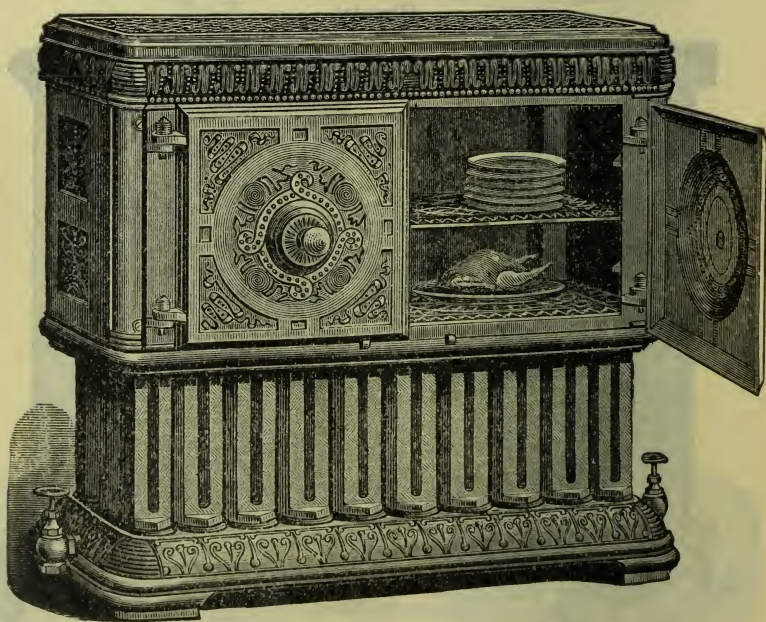
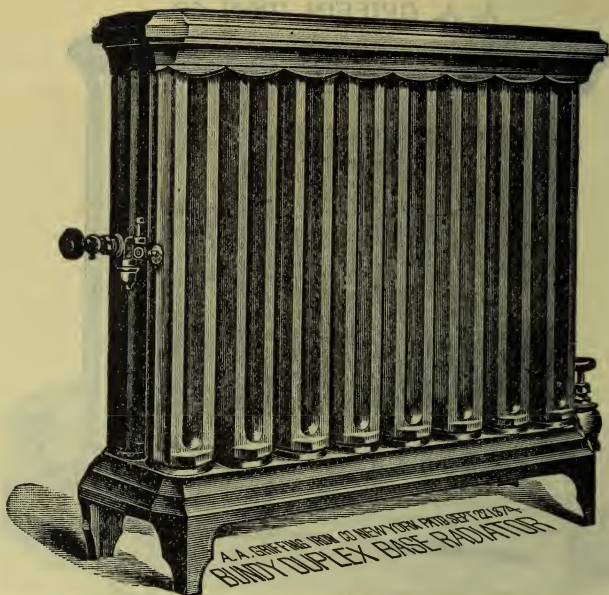


Bundy Corner.



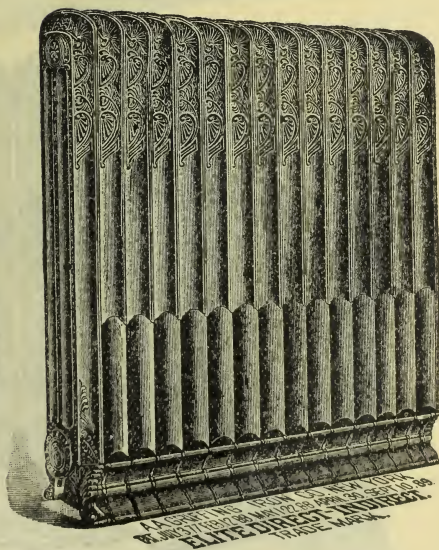
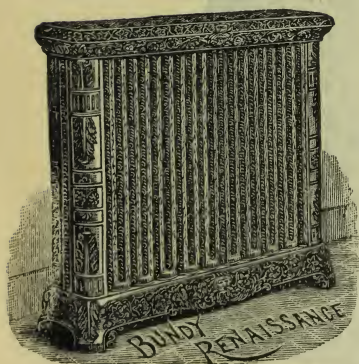
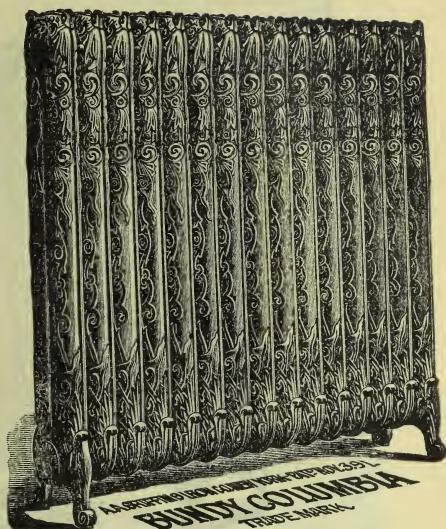
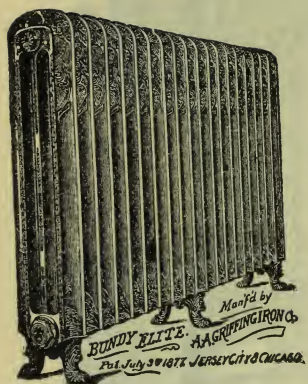
Bundy Circular.

RADIATORS.

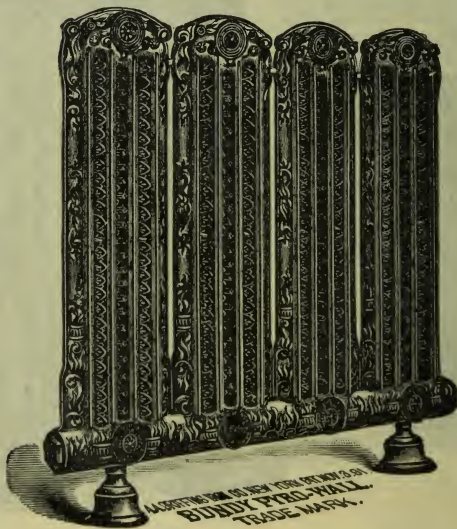
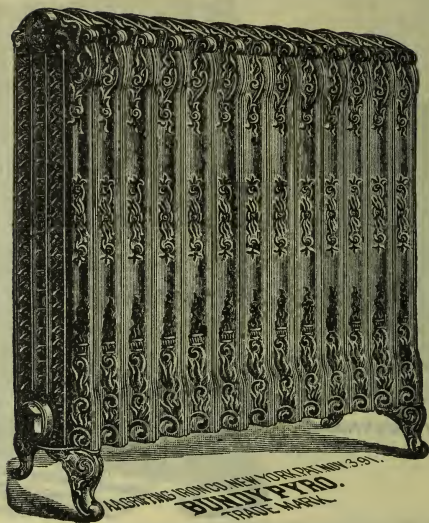


Bundy Dining Room.

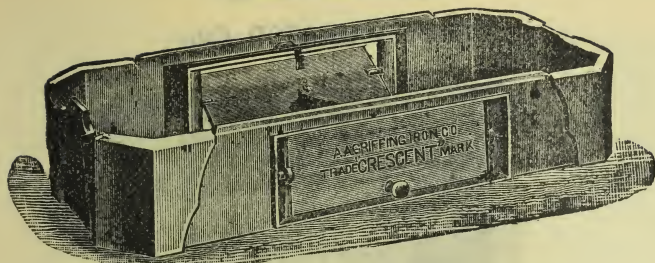
RADIATORS.



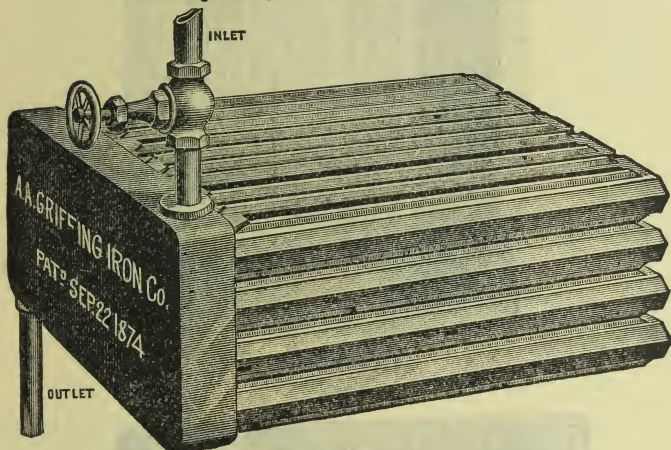
RADIATORS.



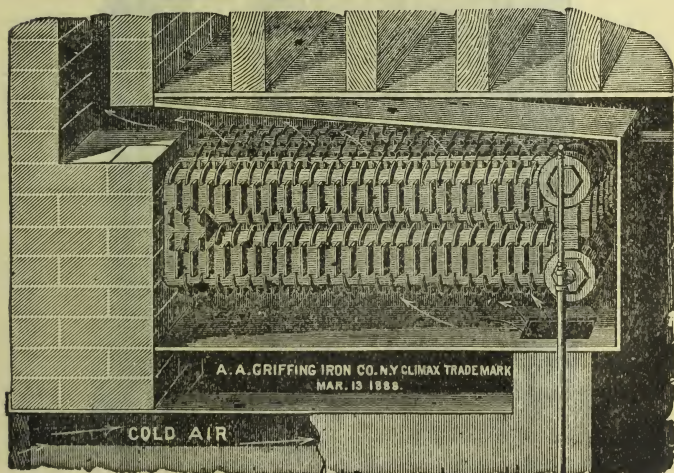
RADIATORS.



Bundy Duplex Crescent Damper.



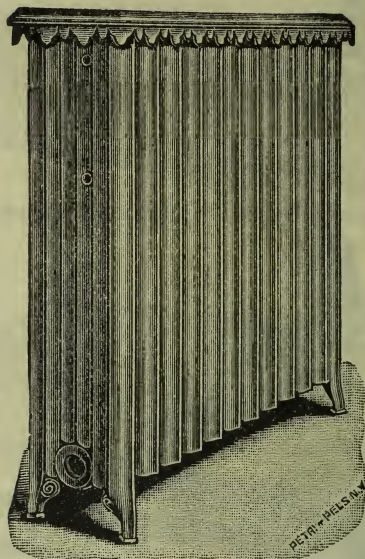
Bundy Horizontal Steam Indirect.



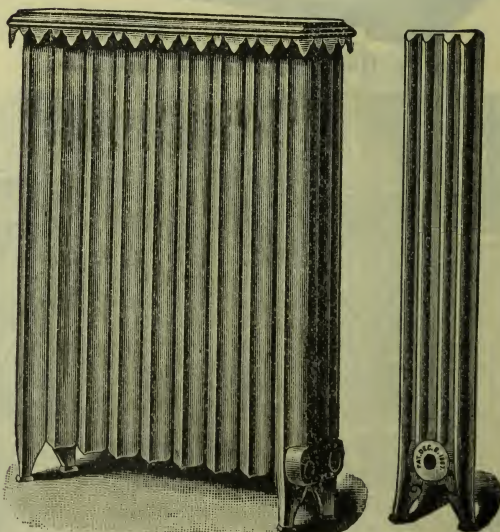
Bundy Climax Hot Water and Steam Indirect.

RADIATORS.

CORRY RADIATOR CO.



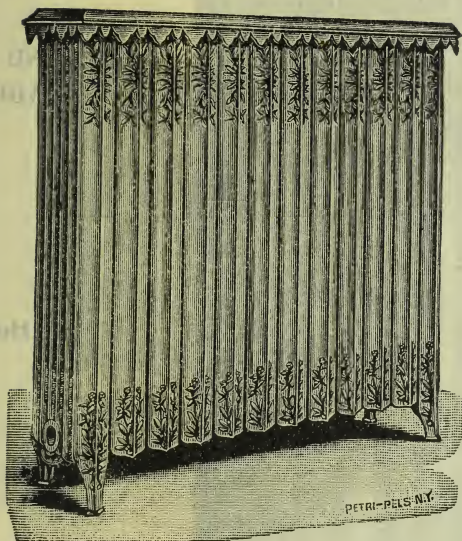
Hercules.



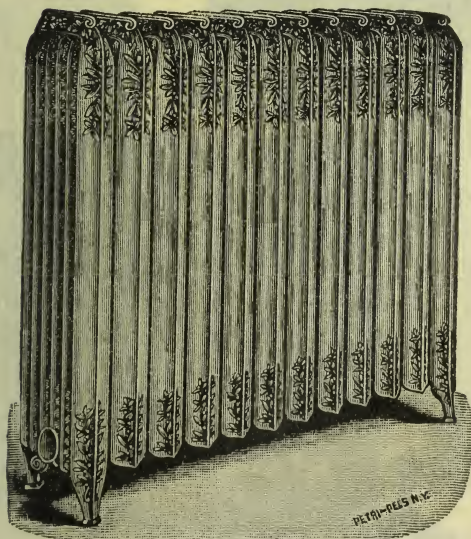
Pearl.

RADIATORS.

COREY RADIATOR CO.

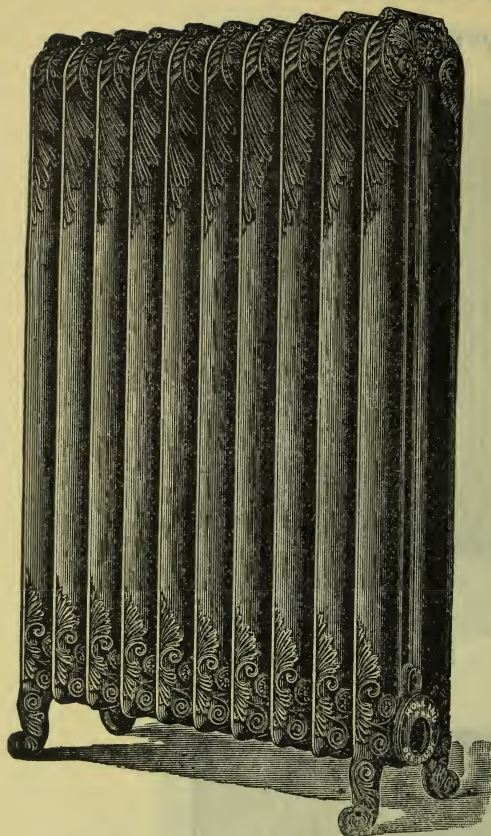


Leader.



Gem.


RADIATORS.

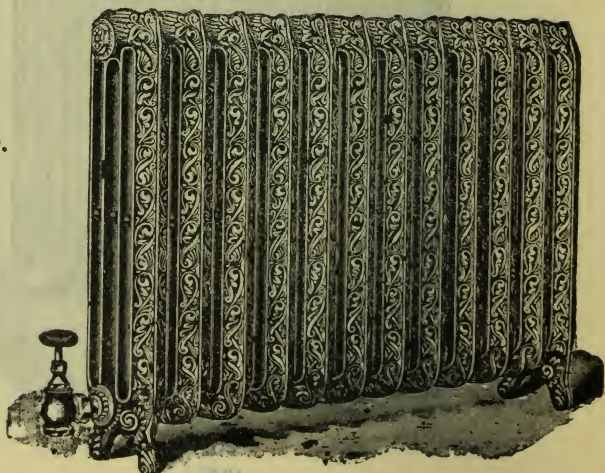


HOLLAND
RADIATOR CO.

 Holland.

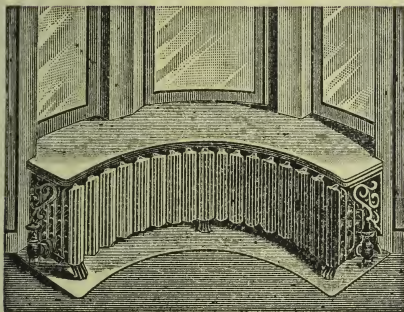
JERECKI
MFG. CO.

Erie. 

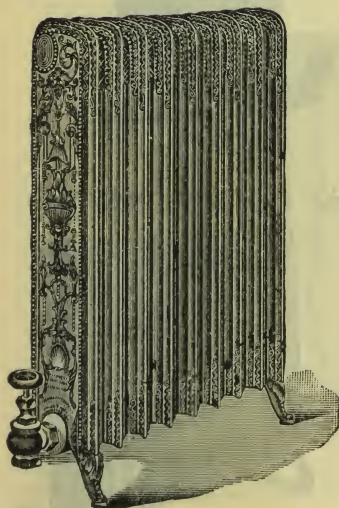


RADIATORS.

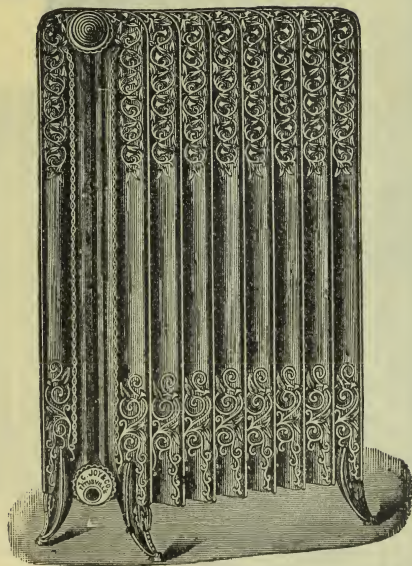
JOY RADIATOR CO.



Crescent Flue Window.



Crescent Flue.



Crescent.

RADIATORS.

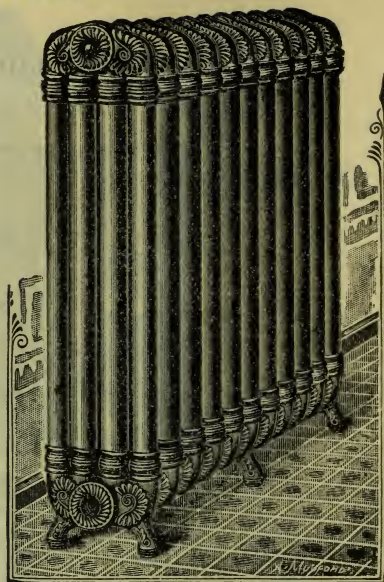
HOPSON & CHAPIN MFG. CO.

Connecticut. 

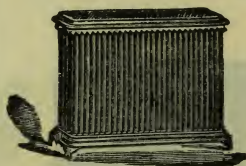
NIAGARA RADIATOR CO.



Niagara.



NASON MFG. CO.



Nason.

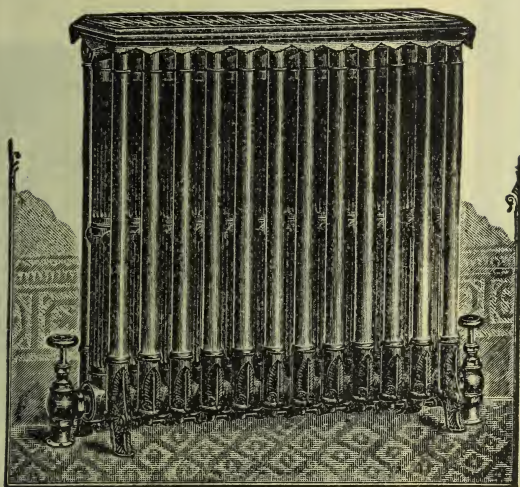
GEO. P. STEEL IRON CO.



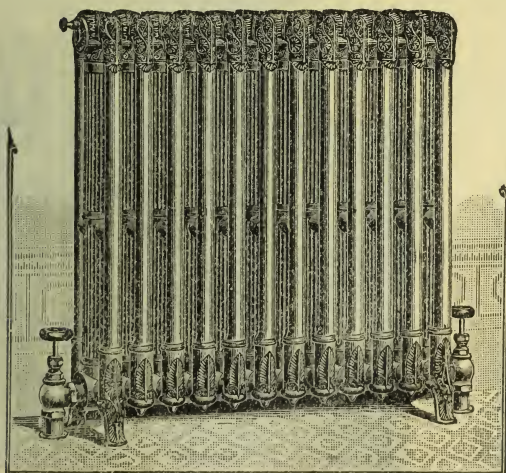
Gove.

RADIATORS.

H. B. SMITH CO.



Union (Ornamental Base).



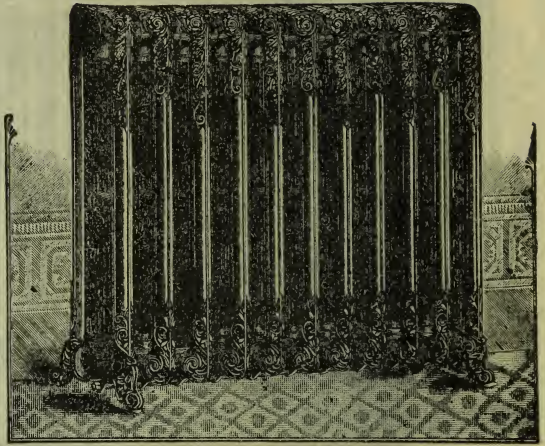
Royal Union.

RADIATORS.

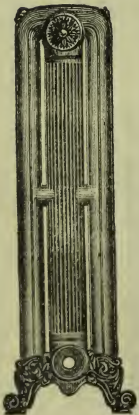
H. B. SMITH CO.



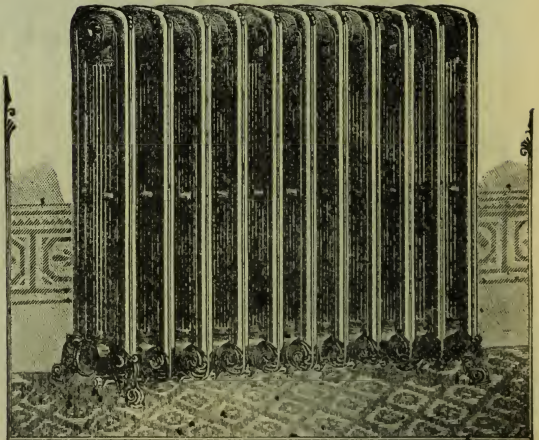
End View.



Imperial Union.

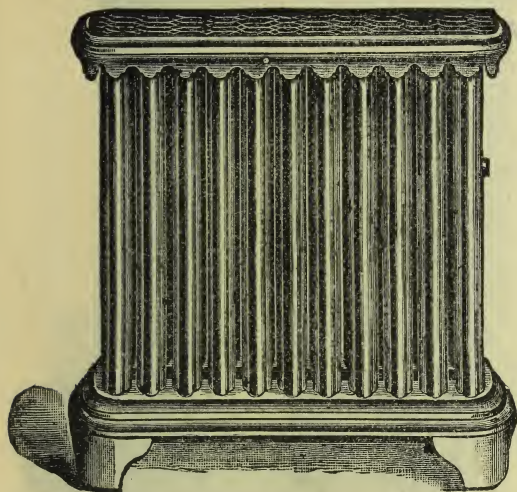


End View.

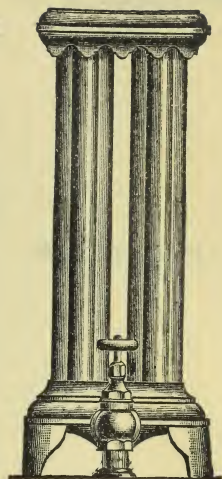


Champion Union.

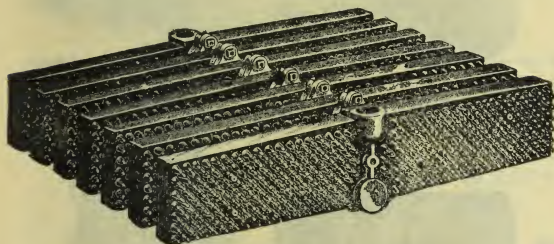
RADIATORS. H. B. SMITH CO.



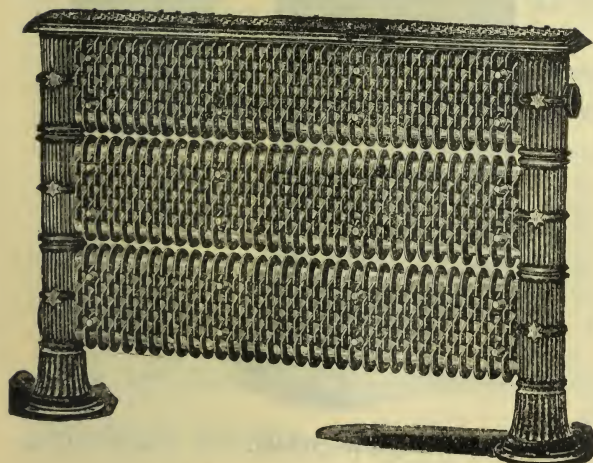
Reed.



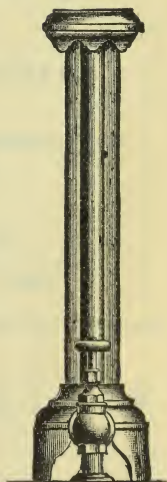
Two Row.



Gold Pin Indirect.



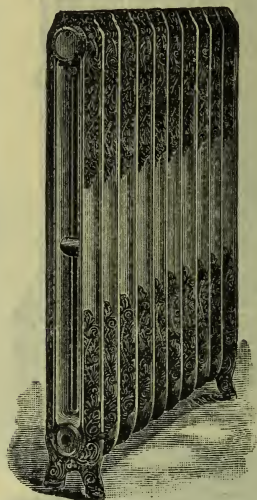
Whittier.



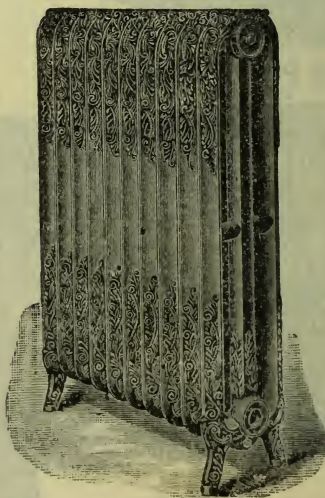
One Row.

RADIATORS.

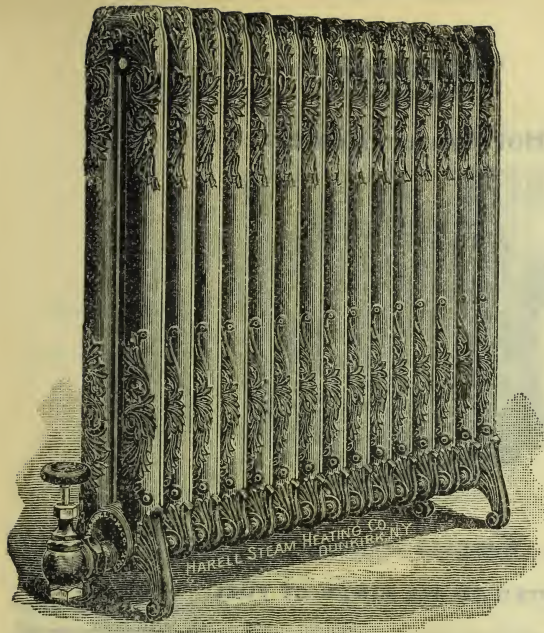
STANDARD RADIATOR CO.



New Style Single Loop.



Standard (New Style).



U. S. RADIATOR
CO.

 **Splendid.**

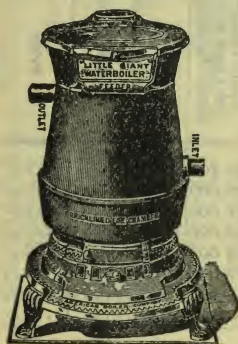
"LITTLE GIANT" (TRADE MARK)

Hot Water Heater.

**FOR HEATING AND SUPPLYING
HOT WATER.**

SURFACE BURNING

FOR HARD AND SOFT COAL.



Number	Cipher	Height, inches	Diameter, inches	Diameter of Grate, inches	Size of Tapping, inches	Diameter of Smoke Pipe	Gallons of Water Heated per Hour	Capacity Sq. Ft. Direct Radiation	Cubic Feet of Air Space Heater will heat with Direct Radiation	List	Cost	Price
12	Lad	35	16	12	1 1/4	5	100	75	2250	\$ 40	.....	.....
16	Lake	38 1/2	19	15	1 1/2	6	200	175	5250	70	.....	.....
20	Lard	40	24	18	2	6	350	300	9000	100	.....	.....

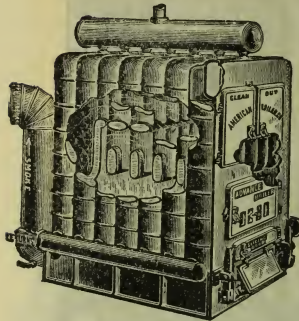
Discount.....

AMERICAN BOILER COMPANY, 84 Lake St., Chicago, Ills.

"ADVANCE"

(TRADE MARK)

Hot Water Heater.



SURFACE BURNING.

ADAPTED TO ALL KINDS OF FUEL.

Number of Heater	Cipher	Height, inches	Floor Space required, inches	Size of Fire Chamber inches	Number of Sections	Diam. Smoke Pipe	Size of Flow Outlet, inches	Number and Size of Return Inlets, inches	Capacity, Square Feet, Direct Radiation in Addit'n to Mains	Cubic Feet of Air Space Heater will heat with Direct Radiation	List.	Cost.	Price.
1	Amen	75	66x53	26 x 28	7	10	5	2-4	1150	34,500	\$412	.....	.....
2	Amid	75	72x53	26 x 34	8	10	5	2-4	1400	42,000	475	.....	.....
3	Anon	75	78x53	26 x 40	9	10	5	2-4	1700	51,000	500	.....	.....
4	Ante	75	84x53	26 x 46	10	10	5	2-4	2000	60,000	640	.....	.....
5	Apex	75	90x53	26 x 52	11	12	5	2-4	2300	69,000	700	.....	.....
6	Apse	75	96x53	26 x 58	12	12	6	2-5	2600	78,000	760	.....	.....
7	Arch	75	102x53	26 x 64	13	12	6	2-5	3000	90,000	840	.....	.....
8	Arid	75	108x53	26 x 70	14	12	6	2-5	3400	102,000	920	.....	.....

Discount.....

Height of fire chamber, 22 inches. Size of feed door, 13½ x 17 inches.

Can be set in brick work, or covered with asbestos cement if desired. Is adapted to all kinds of fuel and constructed with a large feed door allowing the use of all sizes of wood or coal. All joints are screwed iron to iron and are away from the action of the fire.

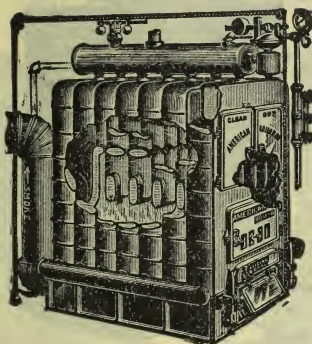
American Boiler Company

84 Lake Street,

Chicago, Ills.

"AMERICAN" (TRADE MARK)

Steam Boiler.



ADAPTED TO ALL KINDS OF FUEL.

Number of Boiler	Cipher	Height, inches	Floor Space required, inches	Size of Fire Chamber inches	Number of Sections	Diam. Smoke Pipe	Steam Outlet, ins.	Number and Size of Return Inlets, inches	Capacity Sq. Feet Direct Radiation	Cubic Feet of Air Space Boiler will Heat with Direct Radiation	List	Cost	Price
51	Abe	75	66x50	26 x 28	7	10	4	2-2 1/2	750	45,000	\$435	.....	.....
52	Ace	75	72x50	26 x 34	8	10	4	2-2 1/2	900	54,000	480	.....	.....
53	Add	75	78x50	26 x 40	9	10	4	2-2 1/2	1050	60,000	535	.....	.....
54	Aft	75	84x50	26 x 46	10	10	4	2-2 1/2	1200	72,000	580	.....	.....
55	Age	75	90x50	26 x 52	11	12	5	2-3	1350	80,000	632	.....	.....
56	Aim	75	96x50	26 x 58	12	12	5	2-3	1500	90,000	685	.....	.....
57	Ale	75	102x50	26 x 64	13	12	5	2-3	1650	96,000	750	.....	.....
58	Arm	75	108x50	26 x 70	14	12	5	2-3	1800	105,000	814	.....	.....

Discount.....

Height of water line, 55 1/2 inches. Height of fire chamber, 22 inches.

These boilers can be set in brick or covered with asbestos cement, if desired. They are adapted to the use of all kinds of fuel, especially wood and soft coal. The feed door being 13 1/2 x 17 inches, permits the use of coarse fuel. Every part of the boiler is accessible for cleaning.

American Boiler Company

84 Lake Street,

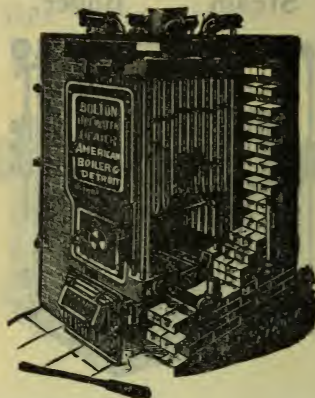
Chicago, Ills.

"BOLTON"

Hot Water Heater.

**SURFACE
BURNING.**

**FOR HARD
AND SOFT COAL.**



Number of Heater	Cipher	DIMENSIONS						Number of Brick required to set Heater	Size of Grate, inches	Diam. Smoke Pipe, inches	Number of Flow and Return Openings	Size of Flow and Return Openings, inches	Capacity Square Feet Direct Radiation	List	Cost	Price
		of Heater, inches			Outside of Brick Work											
		Height	Width	Depth	Height	Width	Depth									
1	Badge	43	21	21	65	34	34½	500	15 x 15	7	4	2	380	\$160	.....	.....
2	Bale	43	21	25	65	37	37	600	19 x 15	7	4	2	475	190	.....	.....
3	Barge	43	21	30	65	37	42	650	23½ x 15	7	4	2	570	210	.....	.....
4	Bask	43	21	32	65	37	44	700	25½ x 15	8	4	2 to 4	630	230	.....	.....
5	Baton	43	24	32	65	40	44	850	25½ x 17	8	4	2 to 4	715	250	.....	.....

DOUBLE FIRE-POT SIZES.

5½	Beach	43	38	25	65	54	37	925	19 x 30	9	6	2 to 4	900	\$300	.....	.....
6	Bearn	43	38	27	65	54	39	950	21 x 30	9	8	2 to 4	1100	350	.....	.....
7	Belch	43	38	32	65	54	44	1000	25½ x 30	9	8	2 to 4	1300	400	.....	.....
8	Bench	43	44	32	65	60	44	1050	25½ x 34	9	8	2 to 4	1700	510	.....	.....
8½	Bergl	43	58	33	65	74	45	1100	25½ x 37	12	8	2 to 4	2200	620	.....	.....

TRIPLE FIRE-POT SIZES.

9	Bifid	43	57	32	65	73	44	1100	25½ x 45	12	12	2 to 4	2400	\$660	.....	.....
10	Bijou	43	66	32	65	82	44	1200	25½ x 51	12	12	2 to 4	2700	730	.....	.....
10½	Birch	48	66	32	72	82	44	1250	25½ x 51	12	12	2 to 4	3100	810	.....	.....

No. 20 SERIES, FOR HEAVY WORK.

20	Bohea	49	39	49	73	70	72	1200	40½ x 30½	12	8	2 to 4	2500	\$690	.....	.....
25	Boom	49	78	49	73	109	72	2000	40½ x 61	14	16	2 to 4	5000	1400	.....	.....
30	Bough	49	118	49	73	174	72	3500	40½ x 91½	18	24	2 to 4	7500	2100	.....	.....

Discount.....

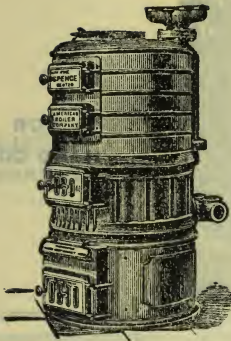
American Boiler Company

84 Lake Street,

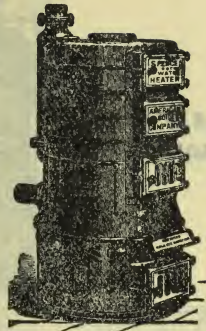
Chicago, Ills.

"SPENCE" (TRADE MARK)

Hot Water Heater.



Style B.



Style C.

DIMENSIONS AND PRICES STYLE B

	Number of Heater	Cipher	Height of Heater inches.	Diameter of Heater, inches	Diameter Fire Pot, inches	Number of Sections	Diameter Smoke Pipe, inches	Number and Size Branch Outlets, inches	Single Outlets, inches	Capacity Square Feet	Direct Radiation	Cubic Feet Air Space Heater will heat with Direct Radiation	List	Cost	Price
10	Sap	47	20	16	5	7	2-1½	.....	225	6,750	\$100	.....	.....	.....	.....
20	Sack	51	23	19	5	7	2-2	.....	300	9,000	150	.....	.....	.....	.....
30	Sand	54	25	20½	5	8	4-2	3½	450	13,500	210	.....	.....	.....	.....
40	Save	57	28	23½	5	9	4-2	4	650	19,500	260	.....	.....	.....	.....
50	Sake	64	33	27	5	10	6-2	5	900	27,000	335	.....	.....	.....	.....
52	Sash	69	33	27	6	10	6-2	5	1,000	30,000	370	.....	.....	.....	.....
60	Same	65	36	30	5	11	8-2	5	1,200	36,000	425	.....	.....	.....	.....
62	Sail	70	36	30	6	11	8-2	5	1,300	39,000	450	.....	.....	.....	.....
70	Sage	67	40	34	5	12	8-2	6	1,700	51,000	560	.....	.....	.....	.....
72	Safe	72	40	34	6	12	8-2	6	1,800	54,000	600	.....	.....	.....	.....

STYLE C

15	See	53	23	16	5	7	2-2	3	275	8,250	\$135	.....	.....	.....	.....
25	Semi	56	25	19	5	8	2-2	3	350	10,500	170	.....	.....	.....	.....
35	Sell	58	28	20½	5	9	4-2	3½	550	16,500	236	.....	.....	.....	.....
45	Send	63	32	25	5	10	4-2	4	800	24,000	300	.....	.....	.....	.....
53	Seat	67	35	28	5	11	5-2	5	1,100	33,000	400	.....	.....	.....	.....
55	Sere	72	35	28	6	11	5-2	5	1,200	36,000	425	.....	.....	.....	.....
63	Sewer	67	39	32	5	12	8-2	5	1,500	45,000	500	.....	.....	.....	.....
65	Sepoy	75	39	32	6	12	8-2	5	1,600	48,000	530	.....	.....	.....	.....
73	Sect	70	46	39	5	13	8-2	6	2,300	69,000	700	.....	.....	.....	.....
75	Serge	76	46	39	6	13	8-2	6	2,500	75,000	740	.....	.....	.....	.....
85	Sense	77	52	44	6	14	8-2	6	3,000	90,000	840	.....	.....	.....	.....

Discount.....

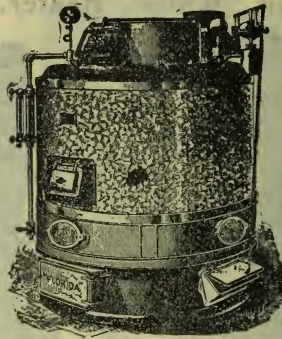
American Boiler Company

84 Lake Street,

Chicago, Ills.

"FLORIDA" (TRADE MARK)

Steam Boiler.



**SELF
FEEDING**

**FOR
HARD COAL**

Number of Boiler	Cipher	Height of Boiler, inches	Diameter of Boiler, inches.	Diameter Fire Pot, inches	Number of Sections	Height of Water Line, inches	Number and Size of Steam Outlets, inches	Size of Return Inlet, inches	Diameter Smoke Pipe, inches	Capacity Square Feet	Direct Radiation	Cubic Feet Air Space Boiler will heat with Direct Radiation	List	Cost	Price
2	Fable	48	30	15	5	34	2-1½	1¼	7	150	8,250	\$150	.....	.....	.....
4	Facet	53	30	15	5	39	2-1½	1¼	7	175	9,625	170	.....	.....	.....
8	Fade	52	36	18	5	36	2-1½	1¼	7	275	15,125	210	.....	.....	.....
10	Fagot	58	36	18	5	42	2-1½	1½	7	325	17,875	230	.....	.....	.....
16	Fail	54	40	21	5	38	2-2	2	8	400	22,000	260	.....	.....	.....
18	Faint	60	40	21	5	44	2-2	2	8	450	24,750	280	.....	.....	.....
20	Fall	60	45	25	5	38	2-2½	2½	10	550	30,250	330	.....	.....	.....
22	False	67	45	25	5	45	2-2½	2½	10	625	34,375	360	.....	.....	.....
25	Fame	60	50	30	5	39	2-3	3	10	750	41,250	390	.....	.....	.....
27	Fancy	67	50	30	5	46	2-3	3	10	900	49,500	430	.....	.....	.....
30	Fang	74	50	32	7	53	2-3	3	10	1,000	55,000	460	.....	.....	.....

DOUBLE BOILERS

44	Farce	60	45x 90	25	10	38	2-3	3	13	1,100	60,500	\$620	.....	.....	.....
47	Farm	67	45x 90	25	12	45	2-3	3	13	1,250	68,750	690	.....	.....	.....
50	Fast	60	50x100	30	10	39	2-3	3	13	1,500	82,500	800	.....	.....	.....
53	Fatal	67	50x100	30	12	46	2-3	3	13	1,800	99,000	840	.....	.....	.....
56	Fates	74	50x100	32	14	53	2-3½	3½	13	2,000	110,000	900	.....	.....	.....

HEAVY DUTY BOILERS

SURFACE BURNING

58	Fault	57	59x115	36	10	42	2-4	2-3	18	2,500	137,500	\$1050	.....	.....	.....
61	Favor	65	59x115	36	12	50	2-4	2-3	18	3,200	176,000	1200	.....	.....	.....
64	Fawn	73	59x115	36	14	58	2-5	2-4	18	4,200	231,000	1350	.....	.....	.....

Discount.....

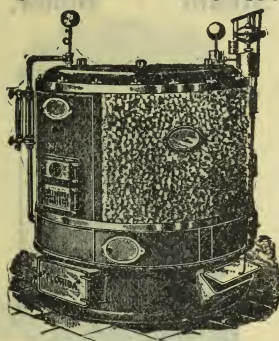
American Boiler Company

84 Lake Street,

Chicago, Ills.

"FLORIDA" (TRADE MARK)

Steam Boiler.



**SURFACE
BURNING**

**FOR HARD
AND SOFT COAL**

Number of Boiler	Cipher	Height of Boiler, inches	Diameter of Boiler, inches.	Diameter Fire Pot, inches	Number of Sections	Height of Water Line, inches	Number and Size of Steam Outlets, inches	Size of Return Inlet, inches	Diameter Smoke Pipe, inches	Capacity Square Feet Direct Radiation	Cubic Feet Air Space Boiler will heat with Direct Radiation	List	Cost	Price
102	Feast	50	30	15	5	34	2-1½	1¼	8	100	5,500	\$150	.....	.....
104	Feed	56	30	15	6	40	2-1½	1¼	8	175	9,625	170	.....	.....
108	Feign	50	36	18	5	35	2-1½	1½	8	250	13,750	200	.....	.....
110	Feint	56	36	18	6	48	2-1½	1½	8	300	16,500	220	.....	.....
116	Fence	47	39	21	5	40	2-2	2	10	350	19,250	240	.....	.....
118	Fern	54	39	21	6	50	2-2	2	10	400	22,000	260	.....	.....
120	Ferry	55	44	25	5	44	2-2½	2½	12	500	27,500	300	.....	.....
122	Fetch	64	44	25	6	53	2-2½	2½	12	600	33,000	350	.....	.....
125	Feud	57	48	30	5	45	2-3	3	12	700	38,500	380	.....	.....
127	Fiat	66	48	30	6	54	2-3	3	12	800	44,000	400	.....	.....
130	Field	75	48	32	7	63	2-3	3	12	900	49,500	440	.....	.....

DOUBLE BOILERS

144	Fiery	55	44x 90	25	10	44	2-3	3	14	1,000	55,000	\$620	.....	.....
147	Fifer	64	44x 90	25	12	53	2-3	3	14	1,200	63,250	690	.....	.....
150	Fifth	57	48x100	30	10	45	2-3	3	14	1,400	77,000	800	.....	.....
153	Fight	66	48x100	30	12	54	2-3	3	14	1,600	88,000	840	.....	.....
156	Filch	75	48x100	32	14	63	2-3	3	14	1,800	99,000	900	.....	.....

HEAVY DUTY BOILERS

158	Finis	57	59x115	36	10	46	2-4	2-3	18	2,500	137,500	\$1050	.....	.....
161	Firm	65	59x115	36	12	54	2-4	2-3	18	3,200	176,000	1200	.....	.....
164	First	73	59x115	36	14	62	2-5	2-4	18	4,200	231,000	1350	.....	.....

Discount.....

American Boiler Company

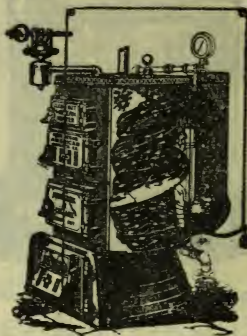
84 Lake Street,

Chicago, Ills.

“ MODERN ”

(TRADE MARK)

Steam Boiler.



SURFACE BURNER FOR HARD OR SOFT COAL

DIMENSIONS AND PRICES

Number of Boiler	Cipher	Height of Boiler, inches.	Diameter of Boiler, inches	Diameter of Grate, inches	Height of Water Line, in.	Number of Sections	Diam. Smoke Pipe, inches	Size of Steam Outlet, inches	Number and Size Return Inlets, inches	Capacity Square Feet Direct Radiation	Cubic Feet of Air Space Boiler will Heat with Direct Radiation	List	Cost	Price
326	Mock	55	32	21	45	3	8	2½	2-1½	325	17,825	\$230	.....	.....
401	Mold	65	32	21	55	4	8	2½	2-1½	400	22,000	260	.....	.....
501	Morn	56	38	26	46	3	9	3	2-2	500	27,500	300	.....	.....
600	Moss	66	38	26	56	4	9	3	2-2	600	33,000	350	.....	.....

Discount.....

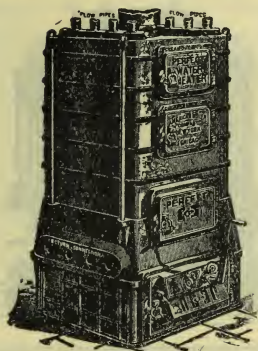
American Boiler Company

84 Lake Street,

Chicago, Ills.

"PERFECT" (TRADE MARK)

Hot Water Heater.



**SURFACE
BURNING.**

**HARD OR
SOFT COAL.**

Number of Heater	Cipher	Height, inches	Floor Space Required inches	Area Fire Chambersq. in	Diam. Smoke Pipe, inches	Number of 2-in. Outlets	Special Single Outlet, inches	4-in. Screwed Hubs Green-house Openings	Cap. Sq. Ft. in add'n to Mains	Cubic Feet Air Space Heater will heat with Direct Radiat'n	List	Cost	Price
21	Pace	47	25 x 32	240	7	4	3	1 Or 2	225	6,750	\$100	.....	.....
22	Pagan	58	26 x 33	256	7	4	3	1 Or 2	300	9,000	150	.....	.....
23	Paid	55	27 x 34	306	8	4	3	1 Or 2	450	13,500	210	.....	.....
24	Pall	60	28 x 35	342	8	4	3	1 Or 2	500	15,000	225	.....	.....
72	Paint	55	30 x 36	441	8	6	3	2	725	21,750	285	.....	.....
25	Pansy	61	31 x 37	441	8	6	3	2	800	24,000	300	.....	.....
26	Panel	56	34 x 42	575	9	8	4	2 to 4	1,100	33,000	400	.....	.....
27	Papal	63	35 x 43	625	9	8	5	2 to 4	1,350	40,500	462	.....	.....
28	Parch	69	36 x 44	676	9	8	5	2 to 4	1,500	45,000	500	.....	.....
218	Pass	58	39 x 47	813	10	8	5	4 to 6	1,800	54,000	600	.....	.....
29	Paste	65	39 x 47	841	10	8	5	4 to 6	2,000	60,000	640	.....	.....
220	Patch	72	40 x 48	869	10	8	5	4 to 6	2,200	66,000	680	.....	.....
270	Pause	61	44 x 52	1,056	11	10	6	4 to 6	2,700	81,000	780	.....	.....
30	Pawn	68	44 x 52	1,089	11	10	6	4 to 6	3,000	90,000	840	.....	.....
320	Payee	75	45 x 53	1,122	11	10	6	4 to 6	3,200	96,000	880	.....	.....
370	Peace	63	47 x 55	1,260	12	12	7	4 to 6	3,700	111,000	980	.....	.....
31	Peck	70	48 x 56	1,296	12	12	7	4 to 6	4,100	123,000	1060	.....	.....
450	Pedal	77	49 x 57	1,332	12	12	7	4 to 6	4,500	135,000	1140	.....	.....
32	Peel	84	49 x 57	1,369	12	12	7	4 to 6	4,800	144,000	1200	.....	.....

EXTRA HEAVY DUTY HEATERS.

230	Peony	88	94 x 72	2,178	2-11	10	2-6	8	6,000	180,000	\$1680	.....	.....
231	Petty	94	102 x 80	2,592	2-12	12	2-7	8	8,200	246,000	2120	.....	.....
232	Pewit	108	106 x 82	2,738	2-12	12	2-7	8	9,600	288,000	2400	.....	.....

Discount.....

Return inlets are tapped same size and number as outlets. In ordering state whether 2-inch outlets or a special single outlet is required. If not specified 2-inch outlets will be sent.

American Boiler Company

84 Lake Street,

Chicago, Ills.

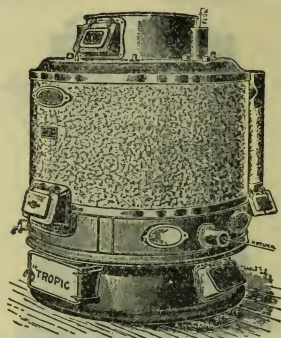
“ TROPIC ”

(TRADE MARK)

Hot Water Heater.

**SELF
FEEDING**

**FOR
HARD COAL**



Number of Heater	Cipher	Height of Heater, inches	Diameter of Heater, inches.	Diameter Fire Pot, inches	Number of Sections	Number of Outlets	Size of Outlets, inches	Diameter of Smoke Pipe, inches	Capacity Square Feet	Direct Radiation	Cubic Feet Air Space Heater will heat with Direct Radiation	List	Cost	Price
5	Tab	48	28	15	4	2	2	8	175	5,250	\$ 85	.....	.....	.....
5½	Tack	54	28	15	5	2	2	8	225	6,750	100	.....	.....	.....
7	Taffy	44	30	21	4	2	2	8	275	8,250	135	.....	.....	.....
9	Tail	49	30	21	5	2	2	8	350	10,500	170	.....	.....	.....
12	Take	54	30	21	6	2	2	8	450	13,500	210	.....	.....	.....
13	Talis	59	30	21	7	2	2	8	525	15,750	230	.....	.....	.....
15	Talk	64	30	21	8	2	2½	8	600	18,000	250	.....	.....	.....
17	Talon	49	39	25	6	2	2½	10	800	24,000	300	.....	.....	.....
19	Tame	55	39	25	8	2	3	10	1,000	30,000	370	.....	.....	.....
21	Tank	61	39	25	10	2	3	10	1,200	36,000	425	.....	.....	.....
24	Taper	59	50	30	6	2	3	13	1,300	39,000	450	.....	.....	.....
26	Tardy	66	50	30	8	2	4	13	1,550	46,500	515	.....	.....	.....
29	Task	73	50	30	10	2	4	13	1,800	54,000	600	.....	.....	.....

DOUBLE HEATERS

39	Tea	55	39x 78	25	16	2	4	14	2,000	60,000	\$720	.....	.....
41	Teem	61	39x 78	25	20	2	4	14	2,400	72,000	760	.....	.....
42	Tell	59	50x100	30	12	2	4	14	2,600	78,000	800	.....	.....
43	Tempt	66	50x100	30	16	2	4	14	3,100	93,000	900	.....	.....
46	Terse	73	50x100	30	20	2	5	14	3,600	108,000	1000	.....	.....

HEAVY DUTY HEATERS, SURFACE BURNING

49	Thank	57	59x115	36	10	2	5	18	4,000	120,000	\$1050	.....	.....
52	They	65	59x115	36	12	2	5	18	5,000	150,000	1200	.....	.....
55	Thigh	73	59x115	36	14	2	6	18	6,000	180,000	1350	.....	.....

Discount.....

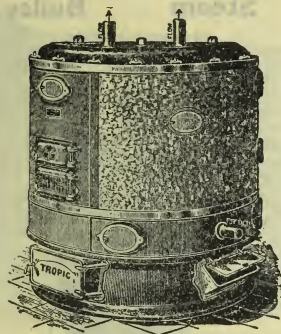
American Boiler Company

84 Lake Street,

Chicago, Ills.

"TROPIC" (TRADE MARK)

Hot Water Heater



**SURFACE
BURNING**

**FOR HARD
OR SOFT COAL**

Number of Heater	Cipher	Height of Heater, inches	Diameter of Heater, inches.	Diameter Fire Pot, inches	Number of Sections	Number of Outlets	Size of Outlets, inches	Diameter of Smoke Pipe, inches	Capacity Square Feet Direct Radiation	Cubic Feet Air Space Heater will heat with Direct Radiation	List	Cost	Price
105	Tibia	50	30	15	5	2	2	8	250	7,500	\$117	.....	.....
107	Tick	56	30	15	6	2	2	8	300	9,000	150	.....	.....
109	Tide	50	36	18	5	2	2	8	400	12,000	190	.....	.....
112	Tier	56	36	18	6	2	2	8	500	15,000	225	.....	.....
113	Tiff	47	39	21	5	2	2 1/8	10	600	18,000	250	.....	.....
115	Tiger	54	39	21	6	2	2 1/8	10	700	21,000	280	.....	.....
117	Till	55	44	25	5	2	2 1/8	12	900	27,000	335	.....	.....
119	Timid	64	44	25	6	2	3	12	1,000	30,000	370	.....	.....
121	Tinge	57	48	30	5	2	3	12	1,200	36,000	425	.....	.....
124	Tissue	66	48	30	6	2	3	12	1,400	42,000	480	.....	.....
126	Title	75	48	32	7	2	4	12	1,600	48,000	530	.....	.....

DOUBLE HEATERS

137	Toast	55	44x 90	25	10	2	4	14	2,000	60,000	\$720	.....	.....
139	Tokay	64	44x 90	25	12	2	4	14	2,200	66,000	740	.....	.....
141	Tooth	57	48x100	30	10	2	4	14	2,400	72,000	760	.....	.....
143	Toper	66	48x100	30	12	2	4	14	2,700	81,000	820	.....	.....
146	Torch	75	48x100	32	14	2	4	14	3,100	93,000	900	.....	.....

HEAVY DUTY HEATERS

149	Tuber	57	59x115	36	10	2	5	18	4,000	120,000	\$1050	.....	.....
152	Tulip	65	59x115	36	12	2	5	18	5,000	150,000	1200	.....	.....
155	Tutor	73	59x115	36	14	2	6	18	6,000	180,000	1350	.....	.....

Discount.....

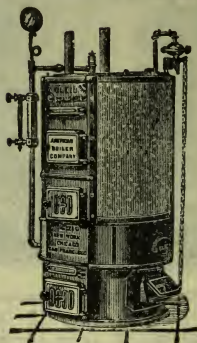
American Boiler Company

84 Lake Street,

Chicago, Ills.

"SOLEIL"
(TRADE MARK)

Steam Boiler.



SURFACE BURNER FOR HARD OR SOFT COAL

DIMENSIONS AND PRICES

Number of Boiler	Cipher	Height of Boiler, inches.	Diameter of Boiler, inches	Diameter Fire Pot, inches	Number of Sections	Diameter Smoke Pipe, inches	Number of Steam Outlets	Size of Steam Outlets, inches	Size of Return Inlet, inches	Capacity Square Feet Direct Radiation	Cubic Feet Air Space Boiler will heat with Direct Radiation	List	Cost	Price
190	Sob	51	33	19	3	8	2	2	2	250	13,750	\$200	.....	.....
195	Soda	56	33	19	4	8	2	2	2	300	16,500	220	.....	.....
210	Soft	55	35	21	3	8	2	2	2	350	19,250	240	.....	.....
215	Soil	61	35	21	4	8	2	2	2	400	22,000	260	.....	.....
250	Soap	66	41	25	3	9	2	2½	2½	500	27,500	300	.....	.....
255	Some	62	41	25	4	9	2	2½	2½	600	33,000	350	.....	.....
280	Song	58	45	28	3	10	2	2½	3	700	38,500	380	.....	.....
285	Soot	63	45	28	4	10	2	2½	3	800	44,000	400	.....	.....
320	Sort	58	51	32	3	12	2	3	3	1,000	55,000	460	.....	.....
325	Soup	65	51	32	4	12	2	3	3	1,100	60,500	520	.....	.....
330	Sown	71	51	32	5	12	2	3	3	1,200	66,000	570	.....	.....

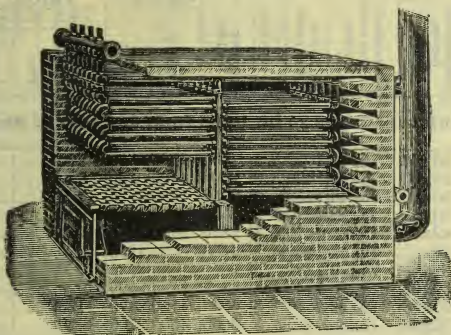
Discount.....

American Boiler Company

84 Lake Street,

Chicago, Ills

ELECTRIC BOILER.



No. Sections.	Size Grate, Inches.	Square feet Heat'g Sur.	Dimensions, Boiler, Inches.	Dimensions, Brickwork, Inches.	No. Brick Required.	Total Height. ft. in.	Shipping Weight.	CAPACITY.		PRICES.			% DISC.		
								Hot Water.	Steam.	Hot Water.			Steam.		
										List.	Cost.	Price.	List.	Cost.	Price.
Size B, with 1 in. Tubes 15 in. long, front and rear of Stand Pipes.															
4	15x12	34	12x33	45x28	500	5.3	450	300	200	\$ 120	---	---	\$ 124	---	---
5	15x15	42	15x33	45x31	530	5.3	480	425	270	145	---	---	150	---	---
6	15x18	51	18x33	45x34	560	5.3	510	530	325	170	---	---	176	---	---
7	15x21	59	21x33	45x37	590	5.3	550	620	390	195	---	---	202	---	---
8	15x24	68	24x33	45x40	620	5.3	610	710	440	220	---	---	228	---	---
9	15x27	76	27x33	45x43	650	5.3	675	800	500	245	---	---	254	---	---
10	15x30	85	30x33	45x46	680	5.3	740	890	560	270	---	---	280	---	---
11	15x33	93	33x33	45x49	710	5.3	790	980	620	295	---	---	306	---	---

Size C, with 1 in. Tubes 18 in. long, front and rear of Stand Pipes.															
4	18x12	40	12x39	51x28	550	5.3	500	380	250	\$ 140	---	---	\$ 146	---	---
5	18x15	50	15x39	51x31	570	5.3	600	500	300	170	---	---	177	---	---
6	18x18	60	18x39	51x34	600	5.3	710	620	400	200	---	---	209	---	---
7	18x21	70	21x39	51x37	620	5.3	820	750	470	230	---	---	240	---	---
8	18x24	80	24x39	51x40	640	5.3	940	860	540	260	---	---	272	---	---
9	18x27	90	27x39	51x43	660	5.3	1100	970	600	290	---	---	303	---	---
10	18x30	100	30x39	51x46	680	5.3	1220	1080	670	320	---	---	335	---	---
11	18x33	110	33x39	51x49	700	5.3	1340	1190	740	350	---	---	366	---	---
12	18x36	120	36x39	51x52	720	5.3	1460	1290	810	380	---	---	398	---	---
13	18x39	130	39x39	51x55	750	5.3	1580	1400	870	410	---	---	429	---	---

Size E, with 1 in. Tubes 24 in. long, front and rear of Stand Pipes.															
4	24x12	52	12x51	63x28	650	5.3	660	500	350	\$ 180	---	---	\$ 188	---	---
5	24x15	65	15x51	63x31	670	5.3	800	700	430	220	---	---	230	---	---
6	24x18	78	18x51	63x34	690	5.3	940	860	540	260	---	---	272	---	---
7	24x21	91	21x51	63x37	720	5.3	1075	1000	630	300	---	---	314	---	---
8	24x24	104	24x51	63x40	750	5.3	1210	1150	720	340	---	---	356	---	---
9	24x27	117	27x51	63x43	780	5.3	1350	1300	810	380	---	---	398	---	---
10	24x30	130	30x51	63x46	810	5.3	1475	1440	900	420	---	---	440	---	---
11	24x33	143	33x51	63x49	840	5.3	1600	1580	990	460	---	---	482	---	---
12	24x36	156	36x51	63x52	870	5.3	1740	1780	1080	500	---	---	524	---	---
13	24x39	169	39x51	63x55	900	5.3	1875	1870	1170	540	---	---	566	---	---
14	24x42	182	42x51	63x58	930	5.3	2010	2000	1260	580	---	---	608	---	---

Manufactured by **ELECTRIC BOILER CO., Rochester, N. Y.**

ELECTRIC BOILER.

No. Sections.	Size Grade, Inches.	Square feet Heat'g Sur.	Dimensions, Boiler, Inches.	Dimensions, Brickwork, Inches.	No. Brick Required.	ft. Total in.	Height. in.	Shipping Weight.	CAPACITY.		PRICES.			% DISC.		
									Hot Water.	Steam.	Hot Water.			Steam.		
											List.	Cost.	Price.	List.	Cost.	Price.

Size F, with 1 in. Tubes 30 in. long, front and rear of Stand Pipes.

6	30x18	114	18x63	75x34	1030	5.3	1650	1000	650	\$ 320	---	---	---	\$ 335	---	---
8	30x24	152	24x63	75x40	1090	5.3	2200	1460	880	420	---	---	---	440	---	---
10	30x30	190	30x63	75x46	1150	5.3	2750	1880	1125	520	---	---	---	525	---	---
12	30x36	228	36x63	75x52	1210	5.3	3300	2240	1350	620	---	---	---	650	---	---
14	30x42	266	42x63	75x58	1270	5.3	3850	2700	1575	720	---	---	---	755	---	---
16	30x48	304	48x63	75x64	1330	5.3	4400	3060	1800	820	---	---	---	860	---	---
18	30x54	342	54x63	75x70	1390	5.3	4950	3420	2025	920	---	---	---	965	---	---
20	30x60	380	60x63	75x76	1450	5.3	5500	3780	2250	1020	---	---	---	1070	---	---
22	30x66	418	66x63	75x82	1510	5.3	6050	4140	2470	1120	---	---	---	1175	---	---
24	30x72	456	72x63	75x88	1570	5.3	6600	4500	2700	1220	---	---	---	1280	---	---

Size GG, with 1-4 in. Tubes 36 in. long, front and rear of Stand Pipes.

6	27x36	180	27x75	87x43	1350	6.5	2220	1940	1200	\$ 570	---	---	---	\$ 588	---	---
8	36x36	240	36x75	87x52	1450	6.5	2960	2640	1620	740	---	---	---	764	---	---
10	45x36	300	45x75	87x61	1550	6.5	3700	3240	2020	910	---	---	---	940	---	---
12	54x36	360	54x75	87x70	1650	6.5	4440	3900	2430	1080	---	---	---	1116	---	---
14	63x36	420	63x75	87x79	1750	6.5	5180	4540	2840	1250	---	---	---	1292	---	---
16	72x36	480	72x75	87x88	1850	6.5	5920	5200	3240	1420	---	---	---	1468	---	---
18	81x36	540	81x75	87x97	1950	6.5	6660	5840	3650	1590	---	---	---	1644	---	---
20	90x36	600	90x75	87x106	2050	6.5	7400	6480	4050	1770	---	---	---	1830	---	---
22	99x36	660	99x75	87x115	2150	6.5	8140	7130	4450	1940	---	---	---	2006	---	---
24	108x36	720	108x75	87x124	2250	6.5	8800	7800	4860	2115	---	---	---	2187	---	---

Size HH, with 1-4 in. Tubes 42 in. long, front and rear of Stand Pipes.

6	27x42	210	27x87	99x43	1600	6.5	2460	2125	1300	\$ 660	---	---	---	\$ 681	---	---
8	36x42	280	36x87	99x52	1730	6.5	3280	2875	1870	860	---	---	---	888	---	---
10	45x42	350	45x87	99x61	1860	6.5	4100	3625	2340	1060	---	---	---	1095	---	---
12	54x42	420	54x87	99x70	1990	6.5	4920	4375	2810	1260	---	---	---	1302	---	---
14	63x42	490	63x87	99x79	2100	6.5	5740	5125	3280	1460	---	---	---	1509	---	---
16	72x42	560	72x87	99x88	2200	6.5	6560	5875	3750	1660	---	---	---	1716	---	---
18	81x42	630	81x87	99x97	2300	6.5	7380	6625	4220	1860	---	---	---	1923	---	---
20	90x42	700	90x87	99x106	2400	6.5	8200	7375	4690	2060	---	---	---	2130	---	---
22	99x42	770	99x87	99x115	2500	6.5	9020	8125	5160	2260	---	---	---	2337	---	---
24	108x42	840	108x87	99x124	2600	6.5	9840	8875	5530	2460	---	---	---	2544	---	---

Size J, with 1-4 in. Tubes 48 in. long, front and rear of Stand Pipes.

6	27x48	240	27x100	112x43	1850	6.5	2700	2500	1600	\$ 740	---	---	---	\$ 764	---	---
8	36x48	320	36x100	112x52	1950	6.5	3600	3500	2150	980	---	---	---	1012	---	---
10	45x48	400	45x100	112x61	2150	6.5	4500	4320	2700	1220	---	---	---	1260	---	---
12	54x48	480	54x100	112x70	2350	6.5	5400	5180	3325	1460	---	---	---	1508	---	---
14	63x48	560	63x100	112x79	2500	6.5	6300	6000	3980	1700	---	---	---	1756	---	---
16	72x48	640	72x100	112x88	2600	6.5	7200	6900	4260	1940	---	---	---	2004	---	---
18	81x48	720	81x100	112x97	2700	6.5	8100	7780	4860	2180	---	---	---	2252	---	---
20	90x48	800	90x100	112x106	2800	6.5	9000	8600	5380	2420	---	---	---	2500	---	---
22	99x48	880	99x100	112x115	2900	6.5	9900	9500	5940	2660	---	---	---	2748	---	---
24	108x48	960	108x100	112x124	3000	6.5	10800	10400	6500	2900	---	---	---	2996	---	---

Intermediate Sizes, Odd Number of Sections, in proportion.

Manufactured by ELECTRIC BOILER CO., Rochester, N. Y.

ELECTRIC BOILER

No. Sections	Size Grate, Inches.	Square feet Heat'g Sur.	Dimensions, Boiler, Inches.	Dimensions, Brickwork, Inches.	No. Brick Required.	Total Height, ft. in.	Shipping Weight.	CAPACITY.		PRICES.			% DISC.		
								Hot Water.	Steam.	Hot Water.			Steam.		
										List.	Cost.	Price.	List.	Cost.	Price.

Size K, with 1 x 4 in. Tubes 54 in. long, front and rear of Stand Pipes.

6	27x54	270	27x112	124x43	2150	6.5	3000	2850	1800	\$ 840	---	---	\$ 864	---	---
8	36x54	360	36x112	124x52	2370	6.5	4000	3900	2430	1120	---	---	1152	---	---
10	45x54	450	45x112	124x61	2490	6.5	5000	4860	3040	1400	---	---	1440	---	---
12	54x54	540	54x112	124x70	2610	6.5	6000	5840	3650	1680	---	---	1728	---	---
14	63x54	630	63x112	124x79	2730	6.5	7000	6800	4250	1960	---	---	2016	---	---
16	72x54	720	72x112	124x88	2850	6.5	8000	7780	4860	2240	---	---	2304	---	---
18	81x54	810	81x112	124x97	2970	6.5	9000	8750	5470	2520	---	---	2592	---	---
20	90x54	900	90x112	124x106	3090	6.5	10000	9720	6075	2800	---	---	2880	---	---
22	99x54	990	99x112	124x115	3210	6.5	11000	10700	6680	3080	---	---	3168	---	---
24	108x54	1080	108x112	124x124	3330	6.5	12000	11700	7300	3360	---	---	3456	---	---

Size L, with 1 x 4 in. Tubes 60 in. long, front and rear of Stand Pipes.

8	36x60	400	36x124	136x52	2500	6.5	4400	4400	2650	\$1270	---	---	\$1310	---	---
10	45x60	500	45x124	136x61	2620	6.5	5500	5400	3375	1590	---	---	1640	---	---
12	54x60	600	54x124	136x70	2740	6.5	6600	6480	4050	1900	---	---	1960	---	---
14	63x60	700	63x124	136x79	2860	6.5	7700	7580	4725	2210	---	---	2280	---	---
16	72x60	800	72x124	136x88	2980	6.5	8800	8640	5400	2520	---	---	2600	---	---
18	81x60	900	81x124	136x97	3100	6.5	9900	9720	6075	2840	---	---	2930	---	---
20	90x60	1000	90x124	136x106	3220	6.5	11000	10800	6750	3160	---	---	3260	---	---
22	99x60	1100	99x124	136x115	3340	6.5	12100	11880	7425	3480	---	---	3590	---	---
24	108x60	1200	108x124	136x124	3500	6.5	13200	13000	8100	3800	---	---	3920	---	---

Size MM, with 1 x 2 in. Tubes 72 in. long, front and rear of Stand Pipes.

6	36x72	486	36x150	162x52	3500	8.2	6000	5150	3200	\$1520	---	---	\$1550	---	---
8	48x72	648	48x150	162x64	3700	8.2	8000	6900	4300	2050	---	---	2090	---	---
10	60x72	810	60x150	162x76	3900	8.2	10000	8640	5400	2580	---	---	2630	---	---
12	72x72	972	72x150	162x88	4100	8.2	12000	10370	6480	3110	---	---	3170	---	---
14	84x72	1134	84x150	162x100	4300	8.2	14000	12100	7560	3640	---	---	3710	---	---
16	96x72	1296	96x150	162x112	4500	8.2	16000	13840	8640	4160	---	---	4240	---	---
18	108x72	1458	108x150	162x124	4700	8.2	18000	15550	9720	4680	---	---	4770	---	---
20	120x72	1620	120x150	162x136	4900	8.2	20000	17280	10800	5200	---	---	5300	---	---
22	132x72	1782	132x150	162x148	5100	8.2	22000	19000	11880	5720	---	---	5730	---	---
24	144x72	1944	144x150	162x160	5300	8.2	24000	20800	13000	6240	---	---	6360	---	---

Size N, with 1 x 2 in. Tubes 84 in. long, front and rear of Stand Pipes.

6	36x84	564	36x174	186x52	4100	8.2	6600	6000	3750	\$1820	---	---	\$1856	---	---
8	48x84	752	48x174	186x64	4370	8.2	8800	8100	5050	2450	---	---	2482	---	---
10	60x84	940	60x174	186x76	4640	8.2	11000	10100	6300	3080	---	---	3140	---	---
12	72x84	1128	72x174	186x88	4900	8.2	13200	12100	7560	3700	---	---	3772	---	---
14	84x84	1316	84x174	186x100	5180	8.2	15400	14100	8820	4320	---	---	4400	---	---
16	96x84	1504	96x174	186x112	5450	8.2	17600	16100	10100	4940	---	---	5036	---	---
18	108x84	1692	108x174	186x124	5700	8.2	19800	18150	11350	5560	---	---	5668	---	---
20	120x84	1880	120x174	186x136	5990	8.2	22000	20200	12600	6180	---	---	6300	---	---
22	132x84	2068	132x174	186x148	6250	8.2	24200	22200	13860	6800	---	---	6932	---	---
24	144x84	2256	144x174	186x160	6500	8.2	26400	24200	15200	7420	---	---	7564	---	---

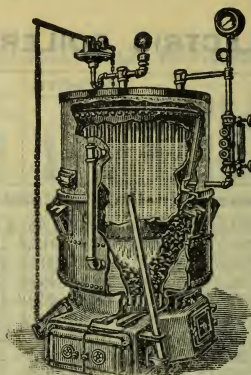
Intermediate Sizes, Odd Number of Sections, in proportion.

Manufactured by **ELECTRIC BOILER CO., Rochester, N. Y.**

THE GORTON STEAM BOILER.

**PERFECT
COMBUSTION.**

**SELF
FEEDING.**



NUMBERS.	0	1	2	3	4	5	6	7
Diameter of Boiler Shell, in	24	28	32	35	41	43	51	54
Height of Boiler Shell "	30	33	33	37	37	45	45	45
Dia. outside of Jacket "	30	31	35	38	45	46	55	57
Total Height of Boiler } without trimmings in }	64	67	69	72	80	87	90	92
Diameter of Fire Pot, in	18	19	21	24	30	32	38	40
Height of Water Line } from bottom of base, in }	51	54	55	50	63	70	73	74
Number of Tubes ...	21	31	35	45	67	72	100	128
Length of Tubes ... in	27	30	30	34	34	42	42	42
Diameter of Tubes ... "	2½	2½	2½	2½	2½	2½	2½	2½
Number of Steam Outlets	2	2	2	2	2	2	2	2
Dia. of Steam Outlets in	1½	1½	2	2	2½	2½	3	3
Diameter of Return Pipe "	2	2	2	2	2½	2½	2½	2½
Diameter of Smoke Flue "	7	7	8	8	10	10	12	12
Square ft. of Boiler Surface	45	60	75	105	140	185	260	320
No. of sq. feet of direct } radiating surface it will }	260	350	450	630	850	1100	1500	1900
supply }								
Price of Boiler complete } with trimmings ... }	\$178	\$208	\$243	\$298	\$378	\$443	\$618	\$668
Cost ... ..	...	...	...	...	...	...	...	...
Price ... ..	...	...	...	...	...	...	...	...
Weight of Boiler ... lbs	1645	1685	2025	2375	3300	3650	4575	5250

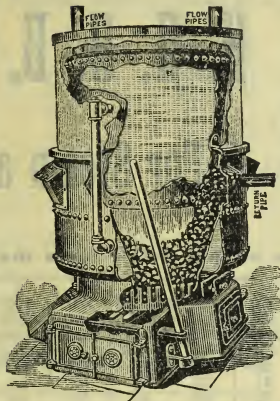
SPECIAL NOTICE—Nos. 0, 1, 2 and 3 Boilers are made with cast-iron water-legs, unless otherwise ordered.

The price of Nos. 2 and 3 Boilers with wrought-iron water-legs are \$278 and \$328 respectively.

Gorton & Lidgerwood Co., 96 Liberty St., N. Y.

THE GORTON HOT WATER BOILER.

VERTICAL
CIRCULATION.



SELF
FEEDING.

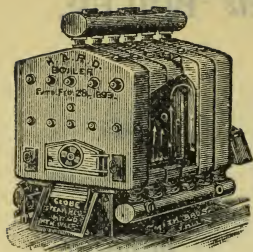
NUMBERS,	20	21	22	23	24	25	26	27
Diameter of Boiler Shell in	24	28	32	35	41	43	51	45
Height of Boiler Shell "	30	33	33	37	37	45	45	45
Dia. outside of Jacket "	30	31	35	38	45	46	55	57
Total Height of Boiler "	64	67	69	72	80	87	90	92
Diameter of Fire Pot "	18	19	21	24	30	32	38	40
Number of Tubes	21	31	35	45	67	72	100	128
Length of Tubes ... in	27	30	30	34	34	42	42	42
Diameter of Tubes ... "	2½	2½	2½	2½	2½	2½	2½	2½
Number of Flow Pipes ...	2	2	2	2	2	2	2	2
Dia. of Flow Pipes in	2½	2½	3	3	3½	3½	4	4
Number of Return Pipes	1	1	1	1	1	1	2	2
Dia. of Return Pipes ... in	3½	3½	4½	4½	5½	5½	4	4
Diameter of Smoke Pipe "	7	7	8	8	10	10	12	12
Square ft. of Boiler surface	45	60	75	105	140	185	260	320
No. of sq. feet of direct radiating surface Boiler will supply	450	650	900	1250	1700	2100	3000	3800
Price of Boilers complete without trimmings...	\$170	\$200	\$235	\$295	\$375	\$440	\$620	\$670
Cost ... ..	...	...	...	...	...	...	...	...
Price ... ..	...	...	...	...	...	...	...	...
Weight of Boilers ... lbs	1645	1685	2025	2375	3300	3650	4575	5250

SPECIAL NOTICE—The heating capacities given in the above table includes the surface in all flow and return pipes.

Nos. 20, 21, 22 and 23 boilers are made with cast-iron water legs, unless otherwise ordered.

The prices of Nos. 22 and 23 boilers, made with wrought-iron water legs, are \$270 and \$325, respectively.

Gorton & Lidgerwood Co., 96 Liberty St., N. Y.



H. A. R. D. BOILERS

For Steam and Hot Water.

List No. 1. Sections of this Boiler form the Base and Ash Pit.

Number of Sections	4	5	6	7	8	9	10	11	12
Square feet Steam Radiation	390	500	625	800	900	1025	1175	1325	1500
Sq. ft. Hot Water Radiation	600	775	975	1300	1550	1775	2000	2375	2700
Size of Grate in inches	20x18	20x24	20x30	20x36	20x42	20x48	20x54	20x60	20x66
Square feet of Grate Surface	234	314	4 1-6	5	5 5-7	6 3/4	7 1-7	8 1/4	9 4-9
Square feet of Fire Surface	66	85	104	123	142	161	180	199	218
Length of Boiler in in. over all	44	50	56	62	68	74	80	86	92
Height of Boiler in in. over all	62	62	62	62	62	62	62	62	62
Width of Boiler in in. over all	50	50	50	50	50	50	50	50	50
Total Weight	2046	2635	3224	3813	4402	4991	5580	6169	6758
List Price	\$214 50	\$276 25	\$338 00	\$399 75	\$461 50	\$526 25	\$580 50	\$646 75	\$708 50

Cost	_____	_____	_____	_____	_____	_____	_____	_____	_____
Price	_____	_____	_____	_____	_____	_____	_____	_____	_____

Water line 44 inches from bottom of Boiler.

List price of Trimmings for Steam Heater \$19.00. per cent. discount.

List No. 2. Sections of this Boiler form the Base and Ash Pit.

Number of Sections	7	8	9	10	11	12	13	14
Square feet of Steam Radiation	1300	1450	1700	1860	2050	2232	2418	2604
Square feet of Hot Water Radiation	2300	2900	3500	4100	4700	5300	5900	6500
Size of Grate in inches	30x36	30x42	30x48	30x54	30x60	30x66	30x72	30x78
Square feet of Grate Surface	7 1/2	8 3/4	10	11 1/4	12 3/4	13 3/4	15	16 1/4
Square feet of Fire Surface	217	248	279	310	341	372	403	434
Length of Boiler in inches over all	63	69	75	81	87	93	99	105
Height of Boiler in inches over all	78	78	78	78	78	78	78	78
Width of Boiler in inches over all	76	76	76	76	76	76	76	76
Total Weight	6510	7440	8370	9300	10230	11160	12090	13020
List Price	\$705 25	\$806 00	\$906 75	1007 75	1108 25	1209 00	1309 75	1410 50

Cost	_____	_____	_____	_____	_____	_____	_____	_____
Price	_____	_____	_____	_____	_____	_____	_____	_____

Water line 4 feet 8 inches from bottom of Sections.

List price of Trimmings for Steam Heater \$22.00. per cent. discount.

List No. 3. With Separate Base as shown in cut.

Number of Sections	4	5	6	7	8	9	10	11	12
Square feet Steam Radiation	350	400	500	650	800	900	1050	1150	1300
Sq. ft. Hot Water Radiation	500	650	800	1000	1300	1550	1800	2100	2300
Size of Grate in inches	18x18	18x24	18x30	18x36	18x42	18x48	18x54	18x60	18x66
Square feet of Grate Surface	2 1/4	3	3 3/4	4 1/2	5 1/4	6	6 3/4	7 1/4	8 1/4
Square feet of Fire Surface	56	73	90	107	124	141	158	175	192
Length of Boiler in in. over all	42	48	54	60	66	72	78	84	90
Height of Boiler in in. over all	66	66	66	66	66	66	66	66	66
Width of Boiler in in. over all	36	36	36	36	36	36	36	36	36
Total Weight	1848	2409	2970	3571	4000	4572	5056	5500	5952
List Price	\$182 00	\$237 25	\$292 50	\$347 75	\$404 00	\$458 25	\$513 50	\$568 75	\$624 00

Cost	_____	_____	_____	_____	_____	_____	_____	_____	_____
Price	_____	_____	_____	_____	_____	_____	_____	_____	_____

Water line 45 inches from bottom of Base.

List price of Trimmings for Steam Boiler \$19.00. per cent. discount

List No. 4. Sections of this Boiler form the Base and Ash Pit.

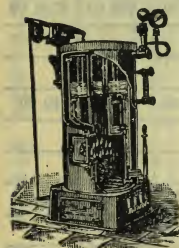
Number of Sections	3	4	5	6	7	8
Square feet of Steam Radiation	90	130	175	220	265	325
Square feet of Hot Water Radiation	175	250	340	450	540	670
Size of Grate in inches	13x10	13x15	13x20	13x25	13x30	13x35
Square feet of Fire Surface	17	24	31	38	45	52
Length over all in inches	26	31	36	41	46	51
Width in inches	27	27	27	27	27	27
Height in inches	40	40	40	40	40	40
Weight	645	805	965	1125	1285	1445
List Price	\$60 00	\$78 00	\$100 75	\$123 50	\$146 25	\$169 00
Cost						
Price						

Water line 33 inches from bottom of Section.

List price of Trimmings for Steam Heater \$15.00. per cent. discount.

The H. A. R. D. Cast-Iron Sectional Boiler for Steam and Hot Water Heating are made with and without independent Sectional Base. Lists No. 1, 2 and 4 are without and list No. 3 has the independent base as shown in the cut.

Manufactured by Globe Steam Heater Co., North Wales, Pa.



GLOBE PORTABLE Steam · and · Hot · Water · Heaters, Of the Best Steel Plates.

Dimensions and Prices of Steam Heaters.

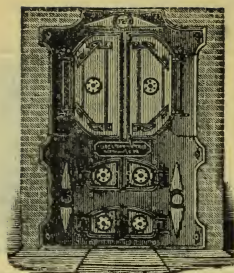
Number	15½	16	19	19½	24	24½	24½	31
Diameter of Casing in inches	23	23	26	31	31	38	38	38
Diameter of Boiler in inches	19	19	22	27	27	34	34	34
Diameter of Fire Box in inches	16	16	19	24	24	31	31	31
Height of Fire Box in inches	30	35	35	35	40	35	40	46
Total Height of Boiler in inches	55	61	61	61	74	66	74	84
Diameter of Steam Openings	1¼	1½	1½	2	2½	2½	2½	3
Diameter of Return Openings	1	1¼	1¼	1½	2	2	2	2
Diameter of Smoke Pipe	6	6	8	10	10	12	12	12
Size Chimney recommended	6x8	8x8	8x10	8x14	8x14	8x20	8x20	8x20
Square feet of Heating Surface	28	40	60	80	107	118	160	200
Square ft. of Direct Radiating Surface	165	220	330	440	585	640	880	1100
List Price	\$145 00	\$170 00	\$220 00	\$245 00	\$270 00	\$300 00	\$335 00	\$400 00
Cost								
Price								

Dimensions and Prices of Globe Portable Hot Water Boiler.

Number	15½	16	19	19½	24	24½	24½	31
Diameter of Casing in inches	23	23	26	31	31	38	38	38
Diameter of Boiler in inches	19	19	22	27	27	34	34	34
Diameter of Fire Box in inches	16	16	19	24	24	31	31	31
Height of Fire Box in inches	30	35	35	35	40	35	40	46
Total Height of Boiler in inches	55	56	56	56	69	61	69	79
No. of two-inch Flow Pipes	2	2	3	4	4	4	5	5
No. of two-inch Return Pipes	2	2	3	4	4	4	5	5
Diameter of Smoke Pipe in inches	6	6	8	10	10	12	12	12
Size of Chimney recommended	6x8	8x8	8x10	8x14	8x14	8x20	8x20	8x20
Square feet of Heating Surface	28	40	60	80	107	118	160	200
Sq. ft. Rad. Surf. (pipes to be covered)	280	400	600	800	1000	1180	1600	2000
List Price	\$125 00	\$145 00	\$190 00	\$210 00	\$232 00	\$258 00	\$285 00	\$345 00
Cost								
Price								

. per cent. discount.

Manufactured by Globe Steam Heater Co., North Wales, Pa.



Ornamental • Boiler • Fronts,

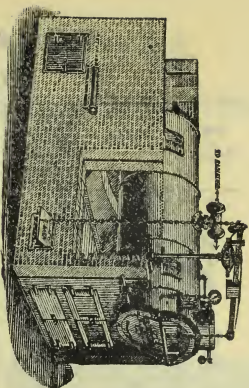
For Return Tubular Boilers.

Dimensions and List Prices.

Diam. of Boiler in inches	30	36	42	48	54	60	66	72
Ht. bot. front to top grt. brs.	24	24	24	24	26½	26½	26½	27
Ht. top grt. brs. to bo'lr in in.	18	18	20	22	22	25	25	25
Total height of front in in.	82	87	95	102	109	120½	126½	136
No. binder brs. or buck stays	4	4	4	4	6	6	6	6
Dis. bet. cntr. of holes in b. s.	6 ft.	6 ft. 6 in.	7 ft. 2 in.	7 ft. 9 in.	8 ft. 3 in.	9 ft. 3 in.	9 ft. 9 in.	10 ft. 4 in.
Length of binder rods	5 ft.	6 ft. 4 in.	6 ft. 10 in.	7 ft. 4 in.	7 ft. 10 in.	8 ft. 4 in.	8 ft. 10 in.	9 ft. 4 in.
Length of grate bars	3 ft.	3 ft. 6 in.	4 ft.	4 ft. 6 in.	5 ft.	5 ft. 6 in.	6 ft.	6 ft. 6 in.
Size rear ash door in inches	16x18	16x18	16x18	16x18	16x18	16x18	16x18	16x18
Approximate weight in lbs.	1800	2500	3500	4000	4500	5000	5900	6500
Fronts, str. & arch dead plts.	\$30 00	\$34 50	\$36 80	\$43 50	\$53 70	\$60 00	\$88 00	\$116 00
Cost								
Price								
List rear ash door and frame	\$2 20	\$2 20	\$2 20	\$2 20	\$2 20	\$2 20	\$2 20	\$2 20
Cost								
Price								
List rear ash T bars	\$1 50	\$1 65	\$1 70	\$2 90	\$3 30	\$3 75	\$3 90	\$4 45
Cost								
Price								
List grate bearers	\$1 50	\$1 95	\$2 00	\$3 20	\$3 50	\$4 00	\$4 15	\$4 40
Cost								
Price								
List buck stays	\$4 10	\$4 75	\$5 10	\$5 80	\$10 95	\$12 05	\$14 75	\$15 20
Cost								
Price								
List binder rods	\$1 80	\$2 00	\$2 10	\$3 40	\$3 60	\$3 70	\$4 20	\$4 40
Cost								
Price								
List anchor bolts, 5 ft. long	\$1 60	\$1 65	\$1 70	\$1 85	\$3 40	\$3 60	\$4 00	\$4 20
Cost								
Price								
List common grate bars	\$9 10	\$13 00	\$15 50	\$18 20	\$22 15	\$24 25	\$26 25	\$28 00
Cost								
Price								
List complete	\$51 80	\$61 70	\$67 10	\$81 05	\$107 80	\$113 55	\$147 45	\$178 85
Cost								
Price								

.....per cent. discount.

Manufactured by Globe Steam Heater Co., North Wales, Pa.



Horizontal Boiler,

With 1-2 or Arch Front.

Fitted with Damper, Regulator and Centre Hung Draft Doors.

Sizes and List Prices.

Number	6	8	10	12	15	20	25	30	35	40	45	50	60	70	80	90	100
Diameter in inches	24	20	30	30	36	36	42	44	44	44	48	54	60	60	60	64	66
Length of Flues in feet	7	6½	8	9½	8	10	10	10	12	14	14	12	12	14	16	14	14
Number of 3-inch Flues	12	20	20	22	28	30	40	46	46	46	54	68	82	82	82	108	118
Square feet of Heating Surface	90	122	152	185	221	304	380	447	534	621	698	748	915	1064	1213	1370	1485
Square feet of Radiating Surface they supply	630	855	1065	1295	1548	2128	2660	3125	3735	4345	4885	5235	6400	7445	8490	9590	10895
Diameter of Smoke Stack	12	14	14	14	16	16	19	20	20	20	22	25	27	27	27	31	32
Weight with Fixtures as shown in cut	2200	2400	2800	3000	3400	3700	4400	4700	5200	5900							
List with Arch Front	\$185	\$215	\$255	\$280	\$305	\$350	\$425	\$475	\$525	\$575	\$685	\$770	\$950	\$1050	\$1160	\$1280	\$1370
List with Full Front	\$205	\$235	\$285	\$315	\$345	\$385	\$470	\$520	\$580	\$620	\$740	\$825	\$1020	\$1150	\$1255	\$1360	\$1450
Cost with Arch Front																	
Cost with Full Front																	
Price with Arch Front																	
Price with Full Front																	

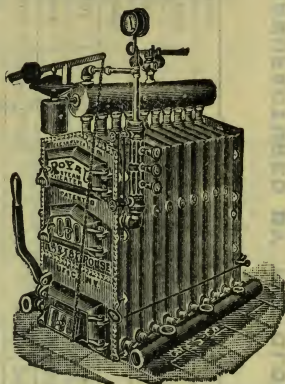
MANUFACTURED BY THE GLOBE STEAM HEATER COMPANY, NORTH WALES, PA.

.....per cent. discount.

ROYAL STEAM HEATERS.

PRICES.

Size of Heater.	STYLE.	List Price including Trimmings and Asbestos Covering.	COST.		PRICE.	
5	ALL SURFACE BURNERS.	\$160.00				
6		180.00				
7		200.00				
8		220.00				
9		240.00				
10		260.00				
16		260.00				
17		290.00				
18		320.00				
19		350.00				
20		380.00				
21		410.00				
22		460.00				
23		500.00				
24		540.00				
25		580.00				



DISCOUNT.....

SIZES AND DIMENSIONS.

Size of Heater.	Number of Sections	Square feet of Direct Radiat'n Heater will supply.	Cubic Feet of Air Space Heater will heat with direct radiat'n and proper piping.	Size of Fire Chamber	Square Feet of Surface in Heater.	Height of Water Line	Height of Heater including Drnm.	Length of Heater including Smoke Connection.	Width of Heater, including Return Manifold.	Size of Smoke Pipe.	Size of Steam Connections.	Size of Return Connections.
				Inches.		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
5	5	175	8,750	19x16	34	35	50	46	38	8	2½	2-2
6	6	225	11,250	19x20	40	35	50	50	38	8	2½	2-2
7	7	275	13,750	19x24	46	35	50	54	38	8	2½	2-2
8	8	325	16,250	19x28	52	35	50	58	38	8	3	2-2½
9	9	375	18,750	19x32	58	35	50	62	38	8	3	2-2½
10	10	425	21,250	19x36	64	35	50	66	38	8	3	2-2½
16	6	400	20,000	23x20	78	47	68	54	42	10	2½	2-2
17	7	450	22,500	23x24	92	47	68	58	42	10	2½	2-2
18	8	500	25,000	23x28	106	47	68	62	42	10	3	2-2½
19	9	600	30,000	23x32	120	47	68	66	42	10	3	2-2½
20	10	700	35,000	23x36	134	47	68	70	42	10	3	2-2½
21	11	800	40,000	23x40	148	47	68	74	42	10	4	2-3
22	12	900	45,000	23x44	162	47	68	78	42	10	4	2-3
23	13	1,000	50,000	23x48	176	47	68	82	42	10	4	2-3
24	14	1,100	55,000	23x52	190	47	68	86	42	10	4	2-3
25	15	1,200	60,000	23x56	204	47	68	90	42	10	4	2-3

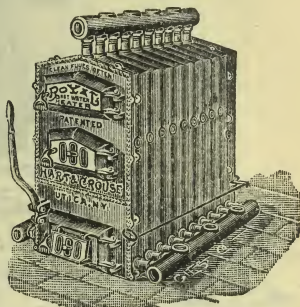
The above ratings are guaranteed to be correct, and are in addition to mains. For indirect radiation, add 50 per cent. larger heater power. Asbestos cement is included for covering top and sides of heater, also a full set of especially constructed improved trimmings as shown in cut, and a poker, hoe and flue brush. Heaters can be set in batteries for large work. Write for Discounts.

HART & CROUSE, 211 WATER ST., NEW YORK.

ROYAL HOT WATER HEATERS.

PRICES.

Size of Heater.	STYLE.	List Price including Asbestos Covering.	COST.		PRICE.	
5	ALL SURFACE BURNERS.	\$125.00				
6		150.00				
7		175.00				
8		200.00				
9		225.00				
10		245.00				
16		250.00				
17		280.00				
18		310.00				
19		335.00				
20		360.00				
21		400.00				
22		440.00				
23		480.00				
24		520.00				
25		560.00				



DISCOUNT.....

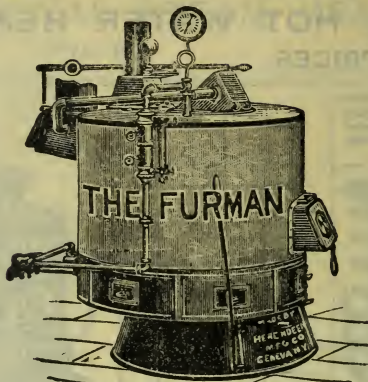
SIZE AND DIMENSIONS.

Size of Heater.	Number of Sections.	Square Feet of Direct Radiation Heater will supply.	Cubic Feet of Air Space Heater will heat with direct radiation and proper piping.	Size of Fire Chamber Inches.	Square Feet of Surface in Heater.	Height of Heater including Drum. Inches.	Length of Heater including Smoke Connection Inches.	Width of Heater, including Return Manifolds Inches.	Size of Smoke Pipe. Inches.	Number and Size of Flow Openings.	Number and Size of Return Openings.
5	5	275	8,250	19x16	34	50	46	38	8	4-2 inch.	6-2 in.
6	6	350	10,500	19x20	40	50	50	38	8	4-2 "	6-2 "
7	7	425	12,750	19x24	46	50	54	38	8	4-2 "	8-2 "
8	8	500	15,000	19x28	52	50	58	38	8	5-2 "	8-2 "
9	9	575	17,250	19x32	58	50	62	38	8	6-2 "	10-2 "
10	10	650	19,500	19x36	64	50	66	38	8	6-2 "	10-2 "
16	6	700	21,000	23x20	78	68	54	42	10	4-2 "	6-2 "
17	7	850	25,500	23x24	92	68	58	42	10	4-2 "	8-2 "
18	8	1,000	30,000	23x28	106	68	62	42	10	5-2 "	8-2 "
19	9	1,150	34,500	23x32	120	68	66	42	10	6-2 "	10-2 "
20	10	1,300	39,000	23x36	134	68	70	42	10	6-2 "	10-2 "
21	11	1,500	45,000	23x40	148	68	74	42	10	6-2 "	12-2 "
22	12	1,700	51,000	23x44	162	68	78	42	10	7-2 "	12-2 "
23	13	1,900	57,000	23x48	176	68	82	42	10	7-2 "	12-2 "
24	14	2,100	63,000	23x52	190	68	86	42	10	8-2 "	12-2 "
25	15	2,300	69,000	23x56	204	68	90	42	10	<div style="display: flex; flex-direction: column; align-items: center;"> { 1-4 " { 1-3 " { 1-2 " </div>	<div style="display: flex; flex-direction: column; align-items: center;"> { 4-3 " { 2-2 " </div>

The above ratings are guaranteed to be correct, and are in addition to mains. For indirect radiation, add 50 per cent. larger heater power. Asbestos cement is included for covering top and sides of heater, also poker, hoe and flue brush. Heaters can be set in batteries for large work. Write for Discounts.

HART & CROUSE, 211 WATER ST., NEW YORK.

"Faultless Furman" Steam Boilers.



PRICES OF FURMAN STEAM BOILERS.

SURFACE BURNERS.				MAGAZINE BURNERS.*			
NO.	LIST.	COST.	PRICE.	NO.	LIST.	COST.	PRICE.
0	\$170			0	\$160		
1	190			1	180		
1½	220			1½	210		
2	255			2	240		
2½	285			2½	270		
3	320			3	305		
4	350			4	335		
5	405			5	385		
6	440			6	420		
6½	530						
7	580						
8	700						
9	920						
10	1,050						
11	1,200						
12							

.....% Discount.

The above prices are for either portable or brick set. Portable not made above No. 6.

* Not made larger than No. 6.

SIZES AND DIMENSIONS.

DESCRIPTION.	Portable or Brick Set Styles.									Brick Set Style Only.					
	0	1	1½	2	2½	3	4	5	6	6½	7	8	9	10	11
Number of Boiler.....	0	1	1½	2	2½	3	4	5	6	6½	7	8	9	10	11
Diam. Grate and Fire Pot, in.	16	16	20	20	22	24	24	30	30	26x34	28x36	36x42	36x56	44x56½	44x70½
No. sq. in. Grate Surface...	201	201	314	314	380	452	452	707	707	884	1008	1512	2016	2486	3102
Height to top of Dome, in..	43	49	46	52	53	53	59	58	64	62	72	72	72	82	82
Height to Water Line, in....	35	41	38	44	45	45	51	50	56	56	58	58	58	59	59
Extreme Width Boiler, in....	28	28	31	31	34	37	37	44	44	56	64	64	64	72	72
Extreme Length Boiler, in...	38	38	46	46	50	51	51	60	60	64	96	112	130	124	138
Number of Steam Outlets...	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Size Steam Outlets, in.	2	2	2	2	2½	2½	3	3	3	3	3	3	4	4	4
Size Return Inlet, in.	1	1	1½	1½	1½	2	2	2	2	2-2"	2-2"	2-2"	4-2"	4-2"	4-2"
Diameter Smoke Pipe, in....	7	7	8	8	8	10	10	12	12	12	16	16	18	18	20
No. Brick required	500	500	550	600	650	700	800	900	1000	1400	1750	2250	2750	3250	3500
Sq. feet { With } Mag.	165	200	280	335	430	485	550	725	850	...	...	...	...	...	...
Direct { Mains }															
Radiation. { covered. } Sur.	180	215	300	360	460	535	600	800	950	1200	1500	2000	2800	3500	4200

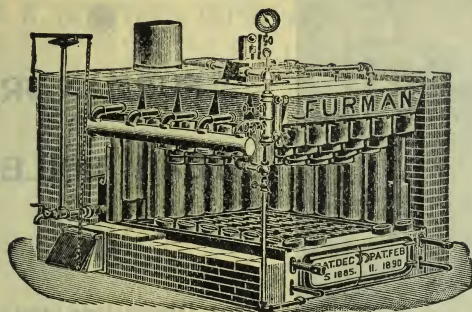
The measurements of sizes 6½, 7, 8, 9, 10, and 11 include brick-work. These sizes are made in Surface Burners only. Our Hard Coal and Soft Coal Burners are listed at the same price. The Portable Boilers have no brick-work.

☞ Figure one size larger grate for soft coal than for hard coal.

A full set of steam trimmings and firing tools go with each boiler.

THE HERENDEN MFG. CO., Geneva, N. Y.

"Faultless Furman" Hot Water Boilers.



PRICES OF FURMAN HOT WATER BOILERS.

SURFACE BURNERS.

NO.	LIST.	COST.	PRICE.
0	\$130		
1	150		
1½	190		
2	235		
2½	265		
3	300		
4	340		
5	410		
6	460		
6½	520		
7	570		
8	690		
9	910		
10	1,040		
11	1,180		
12			

MAGAZINE BURNERS.*

NO.	LIST.	COST.	PRICE.
0	\$120		
1	140		
1½	180		
2	220		
2½	250		
3	285		
4	320		
5	380		
6	430		

.....% Discount.

The above prices are for either portable or brick set. Portable not made larger than No. 6.

* Not made larger than No. 6.

SIZES AND DIMENSIONS.

DESCRIPTION.	Portable or Brick Set Styles.								Brick Set Style Only.						
	0	1	1½	2	2½	3	4	5	6	6½	7	8	9	10	11
Number of Boiler.....	0	1	1½	2	2½	3	4	5	6	6½	7	8	9	10	11
Diam. Grate and Fire Pot, in.	16	16	20	20	22	24	24	30	30	26x34	28x36	36x42	36x56	44x56½	44x70½
No. sq. in. Grate Surface....	201	201	314	314	380	452	452	707	707	884	1008	1512	2016	2486	3102
Height to top of Dome, in....	40	46	43	49	50	50	56	55	61	58	58	58	58	82	82
Extreme Width Boiler, in....	28	28	31	31	34	37	37	44	44	56	64	64	64	72	72
Extreme Length Boiler, in....	38	38	46	46	50	51	51	60	60	64	96	112	130	124	138
Number Water Outlets.....	3	3	3	3	3	4	4	5	5	4	4	5	7	8	10
Size Outlets and Inlets, in...	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Diameter Smoke Pipe, in....	7	7	8	8	8	10	10	12	12	12	16	16	18	18	20
Number Brick required.....	500	500	550	600	650	700	800	900	1000	1400	1750	2250	2750	3250	3500
Sq. feet { With } Mag.	250	300	420	500	650	730	825	1100	1275	.....	.....	.....	.....	.....	.....
Direct { Mains } Radiation. { covered. } Sur.	270	325	450	540	700	800	900	1200	1425	1800	2250	3000	4200	5200	6200

The measurements of sizes 6½, 7, 8, 9, 10, and 11 include brick-work. These sizes are made in Surface Burners only. Our Hard Coal and Soft Coal Burners are listed at the same price. The Portable Boilers have no brick-work.

Figure one size larger grate for soft coal than for hard coal.

Each Hot Water Boiler is supplied with a full set of trimmings, firing tools, and all necessary fitting and connections. (Special size outlets and inlets tapped to order at cost.)

THE HERENDEN MFG. CO., Geneva, N. Y.



*
“FURMAN JR.”
STEAM BOILERS.

*
Sizes, Dimensions, and Prices.

Size of Boiler.....	B	C	D	E
Diameter of Grate, inches.....	12	12	14	14
Dimensions of Base, inches.....	21x25	21x25	25x30	25x30
Height, inches.....	35	42	41	48
Height of Water Section, inches.....	17	24	22	30
Outside Diameter of Water Section at Bottom, inches.....	16	16	20	20
Outside Diameter of Water Section at Top, inches.....	12	12	16	16
No. of Outlets and Inlets.....	2	2	2	2
Size of Outlets and Inlets, inches.....	2	2	2	2
Size Smoke Pipe Required, inches.....	5	5	7	7
No. Square Feet of Direct Radiation Boiler will supply with Mains Covered.....	65 to 85	85 to 100	115 to 150	150 to 185
No. Sq. Ft. of Glass Boiler will heat in a Greenhouse.....	350	450	600	700
List, Complete with Trimmings.....	\$32	\$36	\$42	\$47
Cost, Complete with Trimmings.....	.....	.....	.....	.....
Price, Complete with Trimmings.....	.....	.....	.....	.....



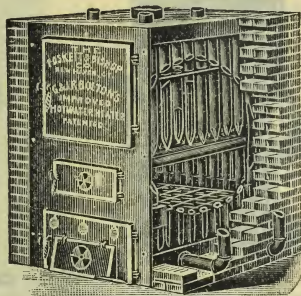
*
“FURMAN JR.”
HOT WATER BOILERS.

*
Sizes, Dimensions, and Prices.

Size of Boiler.....	B	C	D	E
Diameter of Grate, inches.....	12	12	14	14
Dimensions of Base, inches.....	21x25	21x25	25x30	25x30
Height, inches.....	35	42	41	48
Height of Water Section, inches.....	17	24	22	30
Outside Diameter of Water Section at Bottom, inches.....	16	16	20	20
Outside Diameter of Water Section at Top, inches.....	12	12	16	16
No. of Outlets and Inlets.....	2	2	2	2
Size of Outlets and Inlets, inches.....	2	2	2	2
Size Smoke Pipe Required, inches.....	5	5	7	7
No. Square Feet of Direct Radiation Boiler will supply with Mains Covered.....	100 to 125	125 to 150	175 to 225	225 to 275
No. Gallons of Water the Boiler will Heat per hour.....	100 to 125	125 to 150	175 to 225	225 to 275
No. Sq. Ft. of Glass Boiler will Heat in a Greenhouse.....	350	450	600	700
List, Complete.....	\$24	\$28	\$33	\$38
Cost.....	.....	.....	.....	.....
Price.....	.....	.....	.....	.....

G. & J. R. BOLTON'S IMPROVED HOT WATER HEATER.

Portable and Brick Set.



ALL SURFACE BURNERS. SINGLE FIRE POT.

HARD COAL		PER CENT. DIS.		
No.	Style.	List.	Cost.	Price.
2	Surface.	\$140.		
3	"	170.		
4	"	220.		
5	"	275.		
6	"	300.		
7	"	375.		

DOUBLE FIRE POT.

No.	Style.	List.	Cost.	Price.
8	Surface.	\$425.		
10	"	500.		
12	"	625.		
14	"	800.		

HEAVY DUTY.

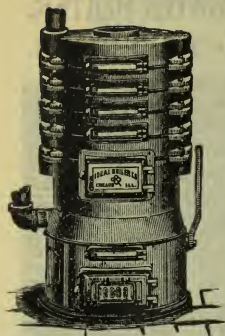
No.	Style.	List.
20	Surface.	Prices on Application
24	"	
28	"	

SIZES AND DIMENSIONS.

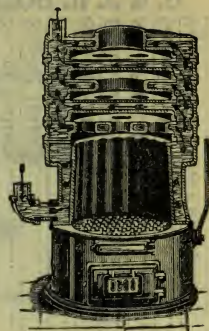
No. of Heaters,	2	3	4	5	6	7	8	10	12	14	20	24	28
Square inch Grate Surface,	304	361	475	589	682	868	950	1178	1364	1736	2356	2728	3472
Total Height,	52	52	52	52	52	52	52	52	52	52	60	60	60
Total Width,	21	24	24	24	24	27	33	45	51	63	90	102	126
Total Length,	24	24	30	36	36	36	36	36	36	36	36	36	36
No. of Outlets,	4	4	6	6	6	8	12	12	12	16	24	24	32
Size of Outlets,	2	2	2	2	2	2	2	2	2	2	2	2	2
No. of Returns,	4	4	6	6	6	8	12	12	12	16	24	24	32
Size of Returns,	2	2	2	2	2	2	2	2	2	2	2	2	2
Diameter of Smoke Pipe,	7	7	8	8	10	10	10	2-8	2-8	2-10	4-8	4-10	4-10
No. of Brick,	390	410	485	550	575	600	650	675	700	800	1350	1400	1600
Shipping Weight,	842	960	1170	1350	1480	1665	2340	2700	2960	3330	5400	5920	6660
Square feet Direct Radiation,	400	500	700	900	1100	1300	1600	2200	2500	3200	5000	6000	7000

MANUFACTURED BY
THE FOSKETT & BISHOP CO., New Haven, Conn.

Ideal Hot Water Heaters.



ELEVATION VIEW



SECTIONAL VIEW

PRICES.

NO.	LIST	COST		PRICE
13	\$125			
14	150			
15	190			
24	220			
25	240			
26	260			
35	300			
36	335			
37	370			
45	450			
46	490			
47	530			
56	640			
57	680			
58	700			

% Discount.

All heaters furnished with branch header or flange outlet as ordered.

TABLE OF DIMENSIONS AND CAPACITIES.

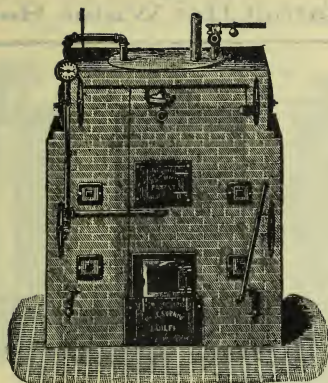
No.	Height of Heater	Diam. of Heater	Diam. of Grate	Number of Sections	Smoke Outlet	Size of Outlet	Capacity Square Feet
13	42"	24"	19"	3	8"	3"	300
14	46"	24"	19"	4	8"	3"	350
15	50"	24"	19"	5	8"	3"	400
24	48"	27"	21"	4	9"	4"	500
25	53"	27"	21"	5	9"	4"	575
26	57"	27"	21"	6	9"	4"	650
35	55"	31"	25"	5	10"	4"	800
36	60"	31"	25"	6	10"	4"	900
37	65"	31"	25"	7	10"	4"	1100
45	57"	37"	30"	5	11"	5"	1300
46	62"	37"	30"	6	11"	5"	1450
47	67"	37"	30"	7	11"	5"	1600
56	66"	43"	36"	6	12"	6"	2000
57	71"	43"	36"	7	12"	6"	2200
58	77"	43"	36"	8	12"	6"	2400

Manufactured by Ideal Boiler Company

36 DEARBORN STREET, CHICAGO.

—THE—
"HAXTUN"

**Steam
Boiler**



—THE—
"HAXTUN"

**Hot Water
Boiler**

PRICES FOR STEAM AND HOT WATER

SOFT AND HARD COAL				HARD COAL ONLY			
NO.	LIST	COST	PRICE	NO.	LIST	COST	PRICE
4	\$200			4½	\$200		
6	250			6½	250		
9	350			9½	350		
10	450			10½	450		
12	500			12½	500		

DISCOUNT %

DIMENSIONS

No. of Boiler - - -	4	6	9	10	12	4½	6½	9½	10½	12½
Diameter of Boiler, in.	27	35	45	53	63	27	35	45	53	63
Height of Boiler, in. -	64	64	64	64	64	64	64	64	64	64
" Ash Pit, in.	14	14	14	14	14	14	14	14	14	14
Smoke Flue - - -	8x10	8x12	9x12	10x12	12x12	8x10	8x12	9x12	10x12	12x12
Diameter Grate, in. -	22	30	40	48	58	22	30	40	48	58
Brick to set - - -	2000	2500	3000	4000	5000	2000	2500	3000	4000	5000
Shipping Weight, lbs.	1700	2300	3100	4000	5000	1700	2300	3100	4000	5000
Sq.ft.Rad'n Steam -	300	600	900	1500	2000	400	700	1100	1700	2400
" " Hot Water	750	1400	2300	3200	4500	950	1650	2800	3650	5400

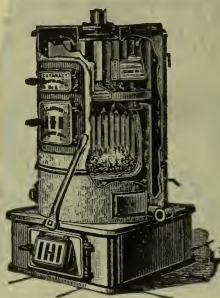
The above prices include Boiler, Bed Plate, Grate, Doors, and all Castings needed to set same in Masonry.

MANUFACTURED BY

KEWANEE BOILER CO.

KEWANEE, ILL.

Oataract Hot Water Heater.



PRICES.

Portable form only.		Disc.,	per ct.
No.	LIST.	COST.	PRICE.
1	\$125.00		
2	150.00		
3	180.00		
4	225.00		

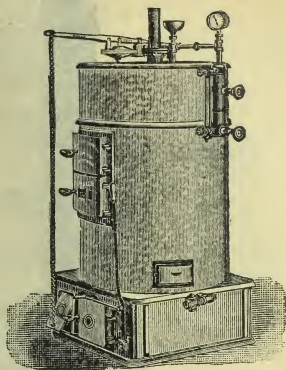
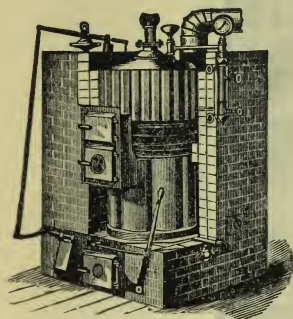
Sizes and Dimensions.

NO. OF HEATER.	1	2	3	4
Total Height, in.	58	63	63	64
Total Width, in.	31	33	36	36
No. of Outlets,	1	1	1	1
Size of Outlets, in.	3	4	4	4½
No. of Returns,	2	2	2	2
Size of Returns, in.	2	2	2	2½
Diam. of Smoke Pipe, in.	7	8	8	10
Sq. ft. of Direct Rad. Supplied, . . .	275	450	600	800
Shipping Weight, lbs.	800	1200	1400	1600

IN ESTIMATING, INCLUDE FLOWS AND RETURNS AS RADIATING SURFACE.

W. C. MOWRY, Norwich, Conn.

PAGE STEAM HEATER.



PRICES.

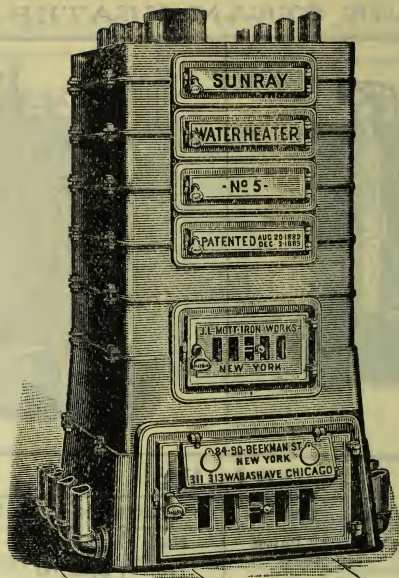
Brick-Set.		Disc. per ct.		Portable.		Disc. per ct.	
No.	LIST.	COST	PRICE.	No.	LIST.	COST	PRICE.
15	\$125.00			110	\$136.00		
18	150.00			120	165.00		
21	180.00			130	200.00		
21 D. S.	200.00			133	225.00		
24	235.00			140	260.00		
24 D. S.	255.00			144	285.00		
30	300.00			150	345.00		
30 D. S.	325.00			155	375.00		

Sizes and Dimensions.

No. OF BOILER.	15	18	21	21 D. S.	24	24 D. S.	30	30 D. S.
Sq. ft. Grate Surface, .	1.03	1.53	2.10	2.35	2.85	3.00	4.43	4.60
No. of Sections, . . .	1	1	1	2	1	2	1	2
Total Height, . . . in.	59	62	68	72	68	72	68	72
Total Width, . . . in.	40	44	48	48	52	52	60	60
Total Length, . . . in.	40	44	48	48	52	52	60	60
No. of Outlets,	1	1	1	1	1	1	1	1
Size of Outlets, . . in.	2	2	2½	2½	3	3	3	3½
Size of Return, . . (2)	1	1	1¼	1¼	1½	1½	1½	1½
Diam. Smoke Pipe, . in.	7	8	8	9	10	10	12	12
No. of Brick required, .	900	1000	1100	1200	1300	1400	1600	1700
Shipping Weight, . . .	1000	1400	1600	1700	1800	2000	2800	3000
Sq. ft. Direct Rad. Supp'd,	175	350	475	550	650	725	850	1000

PORTABLE DIMENSIONS SAME AS BRICK-SET.

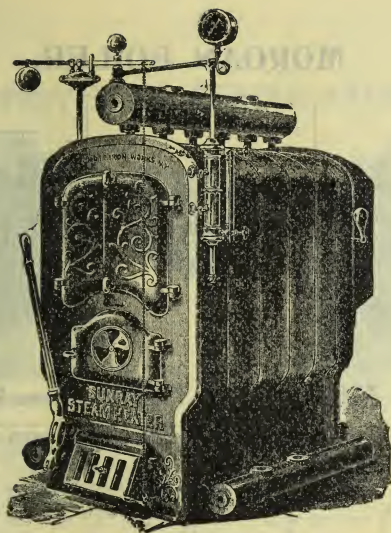
W. C. MOWRY, Norwich, Conn.



“SUNRAY” WATER HEATERS.

Number of Heater.	Height of Heater in inches.	Size of Fire Pot in inches.	Outside Dimensions of Heater at Base.	Size of Smoke Pipe.	Square feet of Fire Surface in Heater.	Actual Square feet of Radiation it will supply exclusive of Mains.	Number of two inch Flow Openings in each Heater.	Number and size of Special Openings that may be put in.	Special Openings for Greenhouse work, with Hubs.	Price.	Cost.	Price.
1	47	17×21	24×28	7 in.	46	350	4	2, 2½ or 3 in.	2	\$100 00	.....	.....
2	54	17×21	24×28	7 in.	55	450	4	2, 2½ or 3 in.	2	140 00	.....	.....
3	56	20×24	28×32	8 in.	71	600	6	2, 2½ or 3 in.	2	165 00	.....	.....
4	60	20×24	28×32	8 in.	84	800	6	2, 3 or 4 in.	3	200 00	.....	.....
5	60	24×28	32×36	9 in.	95	1200	8	2, 3 or 4 in.	4	270 00	.....	.....
6	67	24×28	32×36	9 in.	114	1600	8	2, 3 or 4 in.	4	335 00	.....	.....
7	70	28×32	36×40	10 in.	143	2000	10	3, 3 or 4 in.	4	400 00	.....	.....
8	76	28×32	36×40	10 in.	167	2500	10	3, 3 or 4 in.	5	475 00	.....	.....
9	71	32×37	40×44	11 in.	182	3000	10	4, 3 or 4 in.	5	540 00	.....	.....
10	78	32×37	40×44	11 in.	202	3500	10	4, 3 or 4 in.	6	600 00	.....	.....
11	72	36×41	44×48	12 in.	228	4250	12	4, 4 or 5 in.	6	700 00	.....	.....
12	84	36×41	44×48	12 in.	309	5000	12	4, 4 or 5 in.	6	835 00	.....	.....

THE J. L. MOTT IRON WORKS,
84-90 Beekman St. New York.



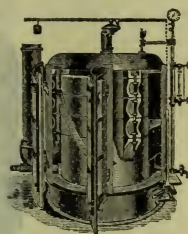
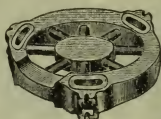
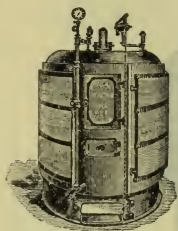
**Capacities and Prices of Mott's "Sunray" Sectional
Steam Boiler.**

Size of Boiler.	Size of Grate.	Size of Smoke Pipe.	Square feet of Fire Surface.	Height of Water Line.	Height of Boiler.	Square feet of direct Radiation it will supply.	Price including all Trimmings.	Cost.	Price.
104	21×22	8	84	52	69	450	\$195 00	-----	-----
105	21×28	8	102	52	69	550	225 00	-----	-----
106	21×34	10	120	52	69	650	255 00	-----	-----
107	21×40	10	138	52	69	775	280 00	-----	-----
108	21×46	10	156	52	69	900	300 00	-----	-----
206	28×32	10	168	57	75	1000	325 00	-----	-----
207	28×38½	10	193	57	75	1150	365 00	-----	-----
208	28×45	12	218	57	75	1350	420 00	-----	-----
209	28×51½	12	243	57	75	1550	470 00	-----	-----
210	28×58	12	268	57	75	1750	520 00	-----	-----
211	28×64½	14	293	57	75	1950	570 00	-----	-----
212	28×71	14	318	57	75	2150	620 00	-----	-----
213	28×77½	16	343	57	75	2350	670 00	-----	-----

**The J. L. Mott Iron Works,
84-90 Beekman Street,**

New York.

MORGAN BOILER.



PRICE LIST MORGAN'S NEW Three Port Boiler.

SURFACE FEED. Disc't.....				*MAGAZINE FEED. Disc't.....			
No.	LIST.	COST.	PRICE.	No.	LIST.	COST.	PRICE.
6	\$225.00	-----	-----		-----	-----	-----
7	290.00	-----	-----		-----	-----	-----
8	350.00	-----	-----		-----	-----	-----
9	430.00	-----	-----		-----	-----	-----
10	510.00	-----	-----		-----	-----	-----

SIZES AND DIMENSIONS.

NUMBER OF BOILER.	6	7	8	9	10
Diameter of Grate in inches.....	17	21	25	30	36
Sq. Ft. of Grate Surface	1.5	2.4	3.4	4.9	7
Total Height in inches	52	56	60	65	85
Height of Water Line	45	47	48	53	70
Outside Diameter in inches.....	35	40	46	52	57
Depth of Fire Pot	13 $\frac{1}{2}$	15 $\frac{1}{2}$	18	22	25 $\frac{1}{4}$
Diameter of Fire Pot	17	21	25	30	36
“ Steam Outlet.....	2	2 $\frac{1}{2}$	3	4	5
“ Return Inlet.....	2	2 $\frac{1}{2}$	3	4	5
“ Smoke Outlet.....	7	8	9	9 $\frac{3}{4}$	12
Area of Chimney Flue in sq. in.	64	80	96	100	120
Number of Water Sections	3	3	3	3	4
Sq. Ft. of Direct Radiation.....	250	450	600	900	1500
*In Course of Construction					

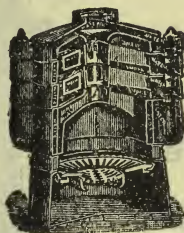
The D. F. MORGAN BOILER CO.,

AKRON, OHIO.

“NOVELTY CIRCULATOR.”



Perspective.



Sectional.

SURFACE BURNING HOT-WATER HEATER.

For Hard Coal, Soft Coal, Coke, or Natural Gas.

SIZE.	No. 21	No. 22	No. 24	No. 25	No. 27	No. 28	No. 30	No. 31	No. 33	No. 34	No. 35	No. 16	No. 17	No. 18
LIST.	\$7.50	\$100	\$120	\$135	\$155	\$180	\$210	\$240	\$280	\$320	\$360	} Not yet finished.		
DISCOUNT.														
COST.														
PRICE.														

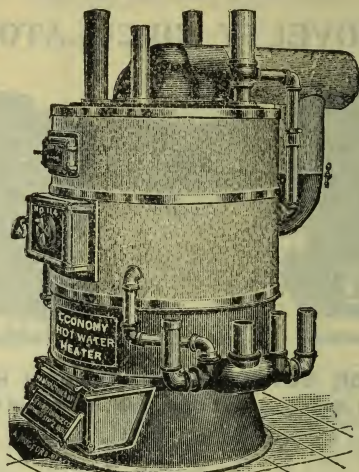
DIMENSIONS:

No. of Boiler.	21	22	24	25	27	28	30	31	33	34	35	16	17	18
Grate Surface in square inches.	227	227	314	314	398	398	550	550	780	780	780	} Not yet finished.		
Height in inches.	46 $\frac{3}{4}$	51 $\frac{3}{4}$	48 $\frac{3}{4}$	54	50 $\frac{1}{2}$	56 $\frac{1}{4}$	52 $\frac{1}{4}$	58 $\frac{3}{4}$	55 $\frac{1}{2}$	62	68 $\frac{1}{2}$			
Width in inches.	31 $\frac{1}{2}$	31 $\frac{1}{2}$	35	35	38 $\frac{1}{2}$	38 $\frac{1}{2}$	42	42	47	47	47			
Depth (front to rear) in inches.	21 $\frac{1}{2}$	21 $\frac{1}{2}$	25	25	28	28	31	31	36 $\frac{1}{2}$	36 $\frac{1}{2}$	36 $\frac{1}{2}$			
No. of Outlets.	1	1	1	1	1	1	1	1	1	1	1			
Diameter of Outlet.	2	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3	4	4	4	4	5			
Number of Returns.	1	1	1	1	1	1	1	1	1	1	1			
Diameter of Return.	2	2	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3	4	4	4	4	5			
Direct Radiation in square feet.	250	300	350	425	500	625	750	950	1150	1400	1650			
Diameter of Smoke Pipe.	7	7	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8	8	9	9	10	10	10			
Diameter of Fire Pot—top.	16	16	19 $\frac{1}{2}$	19 $\frac{1}{2}$	21 $\frac{1}{2}$	21 $\frac{1}{2}$	25 $\frac{1}{2}$	25 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$			
Diameter of Fire Pot—bottom.	17	17	20	20	22 $\frac{1}{2}$	22 $\frac{1}{2}$	26 $\frac{1}{2}$	26 $\frac{1}{2}$	31 $\frac{1}{2}$	31 $\frac{1}{2}$	31 $\frac{1}{2}$			
Shipping Weight.	736	854	916	1077	1091	1293	1554	1840	1964	2336	2716			

MODEL HEATING CO. N. E. Cor. American and Dauphin Sts.
MANUFACTURERS. PHILADELPHIA, PA.

ECONOMY HOT WATER HEATER.

ALL
PORTABLE
AND CASED.



ALL
SURFACE
BURNERS.

PRICES.

HARD COAL.....PER CENT. DIS.					SOFT COAL.....PER CENT. DIS.				
No.	Style.	List.	Cost.	Price.	No.	Style.	List.	Cost.	Price.
108					108				
110	Sur.	250			110	Sur.	250		
114	Sur.	325			114	Sur.	325		
118	Sur.	425			118	Sur.	425		
120	Sur.	600			120	Sur.	600		
122					122				

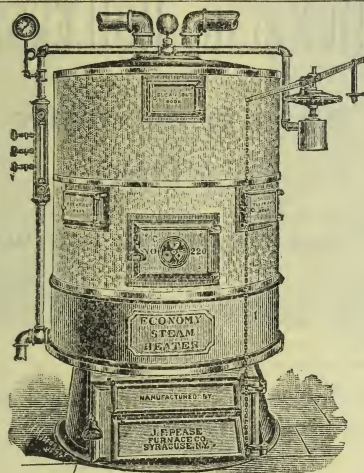
SIZES AND DIMENSIONS.

	108	110	114	118	120	122
No. of Boiler						
Sq. in. Grate Surface.....		240	346	471	572	
Total Height, in.....		54	54	58	62	
Total Diam., in.....		29	35	40	45	
No. of Outlets.....		2	2	4	4	
Size of Outlets.....		2½	3	2½, 3	3	
No. of Returns		2	2	3	4	
Size of Returns.....		2½	3	3	3	
Diam. of Smoke Pipe, in.....		9	9	10	10	
Shipping Weight, lbs.....		1450	2100	2500	3800	
Sq. ft. Direct Radiation.....		550	800	1100	1300	

J. F. PEASE FURNACE CO., SYRACUSE, N. Y.

ECONOMY STEAM HEATER.

ALL
PORTABLE
AND CASED.



ALL
SURFACE
BURNERS.

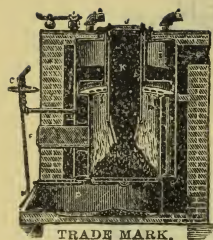
PRICES.

HARD COAL.....PER CENT. DIS.					SOFT COAL.....PER CENT. DIS				
No.	Style.	List.	Cost.	Price.	No.	Style.	List.	Cost.	Price.
208									
210	Sur.	350							
214	Sur.	425							
218	Sur.	550							
220	Sur.	700							
222									

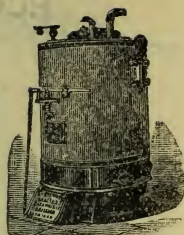
SIZES AND DIMENSIONS.

No. of Boiler.....	208	210	214	218	220	222
Sq. in. Grate Surface.....		240	346	471	572	
Height to Water Line, in.....		48	49	52	59	
Total Height, in.....		65	69	73	77	
Total Diam., in.....		29	35	40	45	
No. of Outlets.....		3	3	4	4	
Size of Outlets.....		2 and 2½	2 and 2½	2½	2½	
No. of Returns.....		1	1	1	2	
Size of Returns.....		1½	1½	2	2	
Diam. of Smoke Pipe, in.....		8	9	10	10	
Shipping Weight, lbs.....		1500	1900	2400	3300	
Sq. ft. Direct Radiation.....		400	550	700	1000	

J. F. PEASE FURNACE CO., SYRACUSE, N. Y.



THE
DUNNING BOILERS,
FOR
**Steam or Hot-Water
HEATING.**



PRICES FOR STEAM AND HOT-WATER.

BRICK-SET.				PORTABLE.			
No.	List.	Cost.	Price.	No.	List.	Cost.	Price.
0	\$167 00			0			
½	209 00			½	\$230 00		
1	230 00			1	250 00		
1½	250 00			1½	275 00		
2	270 00			2	300 00		
2½	290 00			2½	330 00		
3	310 00			3	360 00		
3½	354 00			3½	387 00		
4	420 00			4	460 00		
4½	470 00			4½	512 00		
5	510 00			5	554 00		
5½	570 00			5½	620 00		

DISCOUNT

SIZES AND DIMENSIONS.

Number.	Diameter of Shell.	Height of Shell.	Diameter of Fire-Pot.	Depth of Fire-Pot.	Height of Ash Pit	Total Height over all.	Height of Water Line.	No. of Tubes.	Diameter of Tubes.	Length of Tubes.	No. ft. Heating Surface.	Area of Grate Surface in Sq. ft.	Tapped for Main Pipe.	Size Square of Brick Work.	Height of Brick Work.	No. of Brick required to set.	Diameter of Smoke Pipe	Size of Chimney Flue.	Radiating Surface it will Supply for Steam.	Radiating Surface it will Supply for Hot-water	Shipping Weight
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.		Ins.	Ins.	Ft.	Ft.	Ins.	Ins.	Ins.		Ins.	Ins.	Sq. Ft.	Sq. Ft.	Lbs.
0	25	42	30	20	22	13	61	48	19	2 ½	40	2	2	48	59	1200	8	8x8	225	360	1300
½	30	46	36	20	22	13	54	43 ½	20	58	20	2	2	52	52	1200	8	8x8	300	450	1300
1	30	40	20	26	13	58	48	48	19	2 ½	24	70	2	52	56	1200	8	8x8	350	550	1300
1½	33	40	22	26	13	58	48 ½	21	2 ½	24	80	2 ½	2	56	56	1300	8	8x8	400	650	1400
2	36	42	24	26	13	60	49	23	2 ½	24	90	3	2 ½	60	58	1350	8	8x10	500	800	1600
2½	39	43	27	29	13	61	52	23	3	27	102	4	2 ½	62	59	1450	9	8x12	600	950	1800
3	42	48	30	29	13	67	53 ½	23	3	29	116	5	3	66	62	1600	10	10x12	800	1200	2000
3½	45	48	33	30	13	67	54 ½	26	3	30	140	6	4	69	62	1700	11	12x12	1000	1600	2600
4	48	54	36	33	14	75	59	29	3	33	165	7	4	73	72	1900	12	12x12	1200	1900	2800
4½	52	54	38	33	14	75	59	27	3 ½	33	190	8	4	77	72	2000	13	12x16	1400	2200	3200
5	55	54	40	34	14	75	59	30	3 ½	34	215	8 ¾	4	82	72	2300	14	12x16	1600	2500	3600
5½	56	66	40	36	14	87	71	30	3 ½	46	259	8 ¾	5	82	84	2700	14	12x16	2000	3000	4000

THE ABOVE PRICES INCLUDE BOILER AND CASTINGS COMPLETE.

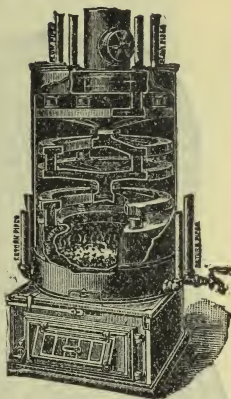
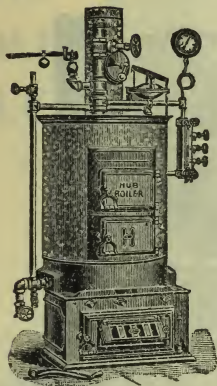
STEAM TRIMMINGS \$ PER SET NET EXTRA.

Manufactured by

NEW YORK CENTRAL IRON WORKS CO.,

GENEVA, N. Y., U. S. A.

The Hub Steam and Hot Water Heaters.



HUB STEAM HEATER.

HUB HOT WATER HEATER.

NO.	LIST.	COST.	PRICE.		NO.	LIST.	COST.	PRICE.
116	\$ 85				116	\$ 75		
118	115				118	105		
120	165				120	155		
122	200				122	190		
126	265				126	250		
130	340				130	325		

Above Prices include Triple Non-Conducting Jacket and Trimmings.

DISCOUNT,.....

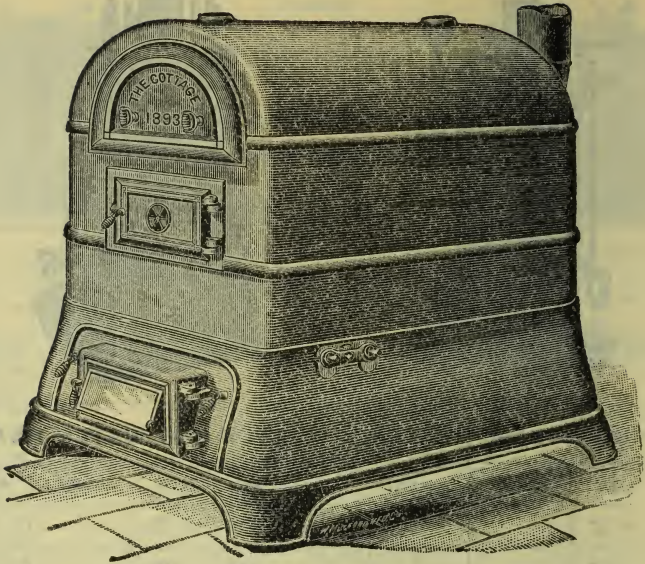
SIZES AND DIMENSIONS.

	STEAM HEATER.						HOT WATER HEATER.					
Number of Boiler	116	118	120	122	126	130	116	118	120	122	126	130
Diam. Grate	16	18	20	22	26	30	16	18	20	22	26	30
No. sq. in. Grate Surface	201	254	314	380	530	706	201	254	314	380	530	706
Height to top of Dome, in.	46	48	50	55	64	71	46	48	50	55	64	71
Height to Water Line, in.	40	41	44	48	54	55						
Extreme Width, in.	26	28	30	33	39	44	26	28	30	33	39	44
Extreme Length, in.	29	31	34	38	45	50	29	31	34	38	45	50
Number and Size of Outlet.....	2-2	2-2	2-2	2-2	2-2½	2-2½	3-2	4-2	6-2	6-2	4-2	4-2
											2-2½	2-2½
											4-2	4-2
											2-2½	2-2½
Number and Size of Return Inlet	2-2	2-2	2-2	2-2	2-2	2-2	3-2	4-2	6-2	6-2		
Diam. Smoke Pipe	6	6	8	8	9	10	6	6	8	8	9	10
Sq. ft. Radiations }	125	175	250	325	400	650	250	300	400	500	750	1000
with }	to	to	to	to	to	to	to	to	to	to	to	to
Mains Covered. }	175	250	325	400	650	1000	300	400	500	750	1000	1500

Fire pot is brick lined. If lining is removed, fire pot is 2 inches larger than size given above.

SMITH & ANTHONY CO., Boston and New York.

THE COTTAGE.



FOR WATER WARMING.

Discount.....

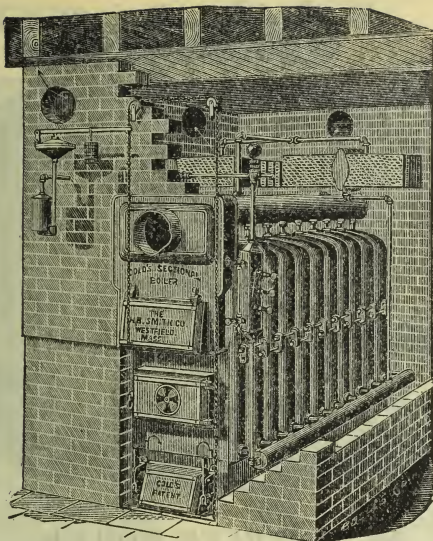
Size of Grate	16 x 16 inches (256 sq. in.=18" round grate)	16 x 20 inches (320 sq. in.=20" round grate)	16 x 24 inches (384 sq. in.=22" round grate)
Direct Radiation Supplied	250 square feet	325 square feet	400 square feet
Total Height	43 inches	43 inches	43 inches
Width	28 inches	28 inches	28 inches
Length	30 inches	34 inches	38 inches
List, F. O. B. Westfield, Mass.	\$80	\$100	\$120
Cost . . . . .	.....	.....	.....
Price . . . . .	.....	.....	.....

REGULAR TAPPING.

SIZE OF GRATE.	FOR SUPPLY PIPES.	FOR RETURN PIPE.
16 x 16 inches	1—2½ inches	1—2½ inches
16 x 20 inches	2—2½ inches	2—2½ inches
16 x 24 inches	2—2½ inches	2—2½ inches

Manufactured by **The H. B. Smith Co.,** WESTFIELD, MASS.

THE GOLD BOILER.



GOLD'S PATENT SECTIONAL X-L BOILER.

No. 1 X L Boiler.

Discount

Number of Sections.	Square Feet of Direct Radiation Supplied.	Square Feet of Indirect Radiation Supplied.*	Size of Grate.	Total Height of Boiler.	Total Width of Boiler.	Total Length of Boiler.	Height of Water Line.	Width of Boiler Section.	Height of Boiler Section.	Height of Ash Front.	Outside Diameter of Top Drum.	Outside Diameter of Side Drums.	Shipping Weight.	List on Cars at Westfield, Mass.	Cost.	Price.
			in.	ft in	ft in	ft in	ft	ft in	ft in	in	in	in	lbs.			
6	240-300	240-270	18x18	5-6	3-9	4-4	4	2-2	3-9	12 1/2	6	4 1/2	2,200	\$195	.....	.....
7	300-340	270-360	18x24	5-6	3-9	4-10	4	2-2	3-9	12 1/2	6	4 1/2	2,500	230	.....	.....
8	340-420	360-450	18x30	5-6	3-9	5-4	4	2-2	3-9	12 1/2	6	4 1/2	2,800	257	.....	.....
9	420-500	450-540	18x36	5-6	3-9	5-10	4	2-2	3-9	12 1/2	6	4 1/2	3,200	285	.....	.....
10	500-580	540-620	18x42	5-6	3-9	6-4	4	2-2	3-9	12 1/2	6	4 1/2	3,500	313	.....	.....
11	580-675	620-700	18x48	5-6	3-9	6-10	4	2-2	3-9	12 1/2	6	4 1/2	3,800	337	.....	.....
12	675-750	700-760	18x48	5-6	3-9	7-4	4	2-2	3-9	12 1/2	6	4 1/2	4,100	362	.....	.....

*Based upon the surface being placed in the main chamber.

No. 2 X L Boiler.

Discount

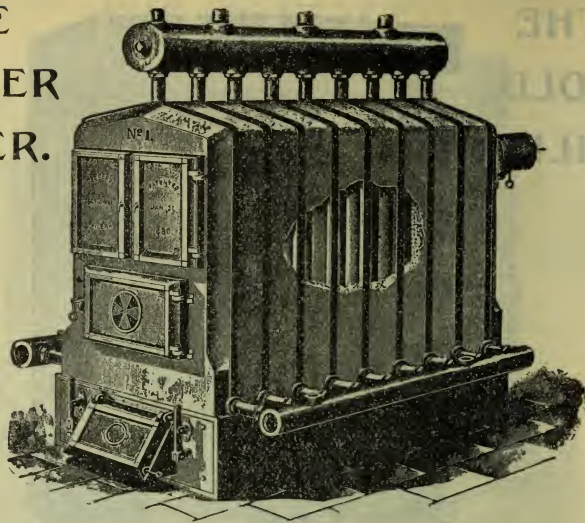
Number of Sections.	Square Feet of Direct Radiation Supplied.	Square Feet of Indirect Radiation Supplied.*	Size of Grate.	Total Height of Boiler.	Total Width of Boiler.	Total Length of Boiler.	Height of Water Line.	Width of Boiler Section.	Height of Boiler Section.	Height of Ash Front.	Outside Diameter of Top Drum.	Outside Diameter of Side Drums.	Shipping Weight.	List on Cars at Westfield, Mass.	Cost.	Price.
			in.	ft	ft in	ft in	ft in	ft in	ft in	in	in	in	lbs.			
9	740-800	750-800	24x36	6	4-3	6	4-6	2-8	4-3	12 1/2	6	4 1/2	4,200	\$362	.....	.....
10	800-900	800-900	24x42	6	4-3	6-6	4-6	2-8	4-3	12 1/2	6	4 1/2	4,600	396	.....	.....
11	900-1040	900-1000	24x48	6	4-3	7	4-6	2-8	4-3	12 1/2	6	4 1/2	5,000	431	.....	.....
12	1040-1150	1000-1100	24x54	6	4-3	7-6	4-6	2-8	4-3	12 1/2	6	4 1/2	5,400	466	.....	.....
13	1150-1270	1100-1200	24x60	6	4-3	8	4-6	2-8	4-3	12 1/2	6	4 1/2	5,900	494	.....	.....
14	1270-1400	1200-1300	24x60	6	4-3	8-6	4-6	2-8	4-3	12 1/2	6	4 1/2	6,300	521	.....	.....

*Based upon the surface being placed in the main chamber.

NOTE.—In estimating the number of feet of radiation these boilers will supply, as per tables, the direct and indirect radiation to be taken separately—i. e. the 6-section No. 1 Boiler will supply 300 feet of direct or 270 feet of indirect radiation, each separately.

Manufactured by **The H. B. Smith Co., WESTFIELD, MASS.**

THE MERCER BOILER.



No. 1 MERCER BOILER.

Discount

Size of Boiler. No. of Sections.	Square feet of Steam Radiation each Boiler will supply.	Square feet of Water Radiation each Boiler will supply.	Size of Grates, inches.	Square feet of Grate Surface.	Square feet of Fire Surface.	Total Height of Boiler, inches.	Total Length of Boiler, inches.	Outside Width of Boiler, inches.	Height of Ash Pit, inches.	Dia. of Smoke Pipes, inches.	Weight, pounds.	List, F. O. B. Westfield.	Cost.	Price.
5	250-300	350-450	18x18	2¼	60	69	39	45	12½	9	2000	\$195	.....	.....
6	300-400	450-600	18x24	3	72	69	45	45	12½	9	2300	230	.....	.....
7	400-500	600-800	18x30	3¾	84	69	51	45	12½	9	2700	264	.....	.....
8	500-600	800-1000	18x36	4½	96	69	57	45	12½	9	3000	305	.....	.....
9	600-700	1000-1200	18x42	5¼	108	69	63	45	12½	9	3400	348	.....	.....
10	700-800	1200-1400	18x48	6	120	69	69	45	12½	9	3800	390	.....	.....

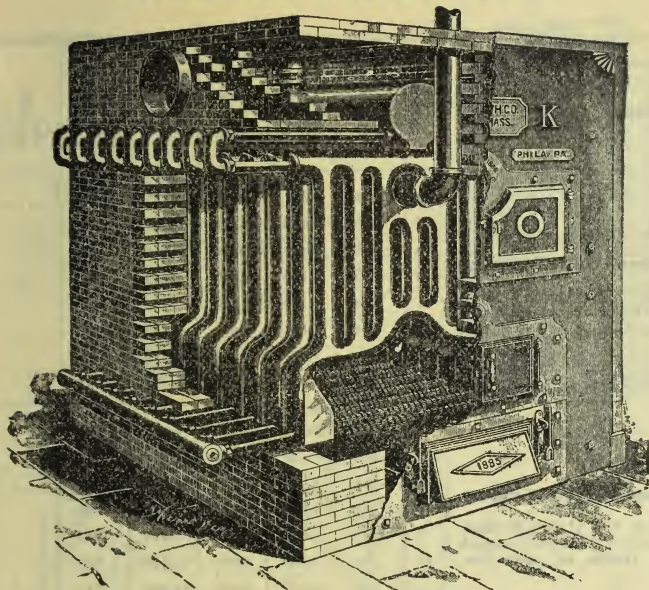
No. 2 MERCER BOILER.

Discount

Size of Boiler. No. of Sections.	Square feet of Steam Radiation each Boiler will supply.	Square feet of Water Radiation each Boiler will supply.	Size of Grates, inches.	Square feet of Grate Surface.	Square feet of Fire surface.	Total Height of Boiler, inches.	Total Length of Boiler, inches.	Outside Width of Boiler, inches.	Height of Ash Pit, inches.	Dia. of Smoke Pipes, inches.	Weight, pounds.	List, F. O. B. Westfield.	Cost.	Price.
7	700-800	1250-1450	27x30	5¾	126	80	51½	60	16	12	3800	\$396	.....	.....
8	800-950	1700	27x36	6¾	144	80	57½	60	16	12	4300	459	.....	.....
9	950-1100	2000	27x42	7¾	162	80	63½	60	16	12	4800	522	.....	.....
10	1100-1250	2300	27x48	9	180	80	69½	60	16	12	5300	584	.....	.....
11	1250-1450	2650	27x54	10½	198	80	75½	60	16	12	5800	647	.....	.....
12	1450-1650	3000	27x60	11¼	216	80	81½	60	16	12	6300	710	.....	.....

Manufactured by **The H. B. Smith Co.,** WESTFIELD, MASS.

THE O. K. BOILER.



Discount.....	Number of Sections.	Square Feet of Heating Surface.	Square Feet of Radiation supplied.	Height of Water Line.	Weight of Materials. Pounds.	List on Cars at Westfield.	Cost.	Price.
No. 2. For Heating or Power. Height, 7' 3"; Width, 5' 11"; with full cast iron front. Fire Surface, 20 square feet to each section. Grate surface, 22" wide, 5½" deep, each section.	6	132	750	4 feet, 3 inches	3,800	304	.....	.....
	7	154	875		4,250	340	.....	.....
	8	176	1,000		4,700	376	.....	.....
	9	198	1,125		5,150	412	.....	.....
	10	220	1,250		5,600	448	.....	.....
	11	242	1,375		6,050	484	.....	.....
	12	264	1,500		6,500	520	.....	.....
	13	286	1,625		6,950	556	.....	.....
	14	308	1,750		7,400	592	.....	.....
No. 3. For Heating or Power. Height, 8'; Width, 7'; with full cast iron front. Fire Surface, 28 square feet to each section. Grate Surface, 33" wide, 5½" deep, each section.	7	210	1,400	4 feet, 7 inches.	5,400	432	.....	.....
	8	240	1,600		6,000	480	.....	.....
	9	270	1,800		6,600	528	.....	.....
	10	300	2,000		7,200	576	.....	.....
	11	330	2,200		7,800	624	.....	.....
	12	360	2,400		8,400	672	.....	.....
	13	390	2,600		9,000	720	.....	.....
	14	420	2,800		9,600	768	.....	.....
	15	450	3,000		10,200	816	.....	.....
No. 4. For Heating or Power. Height, 8'; Width, 7' 4"; with full cast iron front. Fire Surface, 34 square feet to each section. Grate Surface, 42" wide, 5" deep, each section.	7	255	1,750	4 feet, 6 inches	6,200	496	.....	.....
	8	290	2,000		6,925	554	.....	.....
	9	325	2,250		7,650	612	.....	.....
	10	360	2,500		8,375	670	.....	.....
	11	395	2,750		9,100	728	.....	.....
	12	430	3,000		9,825	786	.....	.....
	13	465	3,250		10,550	844	.....	.....
	14	500	3,500		11,275	902	.....	.....
	15	535	3,750		12,000	960	.....	.....
	16	570	4,000		12,725	1,018	.....	.....

Manufactured by **The H. B. Smith Co., WESTFIELD, MASS.**

THE MILLS BOILER.

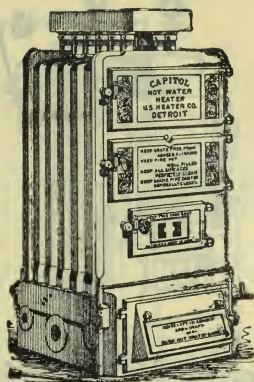
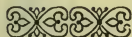
Discount.....	Number of Sections.	Square Feet of Fire Surface.	Square Feet of Radiation supplied.	Square Inches of Grate surface.	Weight of Material. Pounds.	List on cars at Westfield.	Cost.	Price.
No. 4. For Steam or Water Warming. 7' 3" high X 7' 4" wide, 6" thick. 24 square feet of fire surface to each section. Height of water line, 5' 4½".	7	144	864	960	5,578	370	.....	.....
	8	168	1,008	1,152	6,240	410	.....	.....
	9	192	1,152	1,344	6,922	451	.....	.....
	10	216	1,296	1,536	7,595	491	.....	.....
	11	240	1,440	1,728	8,187	531	.....	.....
	12	264	1,684	1,920	8,940	571	.....	.....
	13	288	1,728	2,112	9,612	610	.....	.....
No. 4 1-2. For Steam or Water Warming. 6' 8" high X 7' 3" wide, 6" thick. 30 square feet of fire surface to each section. Height of water line, 5' 5½".	14	312	1,872	2,304	10,284	651	.....	.....
	7	202	1,210	930	6,431	463	.....	.....
	8	238	1,426	1,116	7,212	510	.....	.....
	9	274	1,642	1,302	7,993	556	.....	.....
	10	310	1,858	1,488	8,774	601	.....	.....
	11	346	2,074	1,674	9,559	649	.....	.....
	12	382	2,290	1,860	10,340	695	.....	.....
No. 5. For Power and Warming. 8' 1" high X 7' 3" wide, 6" thick. 36 square feet of fire surface to each section. Height of water line, 5' 9½".	13	418	2,505	2,046	11,094	741	.....	.....
	14	454	2,722	2,232	11,828	777	.....	.....
	6	180	1,080	744	6,536	451	.....	.....
	7	216	1,296	930	7,636	494	.....	.....
	8	252	1,512	1,116	8,345	548	.....	.....
	9	288	1,728	1,302	9,255	602	.....	.....
	10	324	1,944	1,488	10,164	656	.....	.....
No. 6. For Power and Warming. 9' 8" high X 8' 8" wide, 6" thick. 66 square feet of fire surface to each section. Height of water line, 7' 3½".	11	350	2,160	1,674	11,075	707	.....	.....
	12	396	2,376	1,860	11,983	764	.....	.....
	13	432	2,592	2,046	12,855	818	.....	.....
	14	468	2,808	2,232	13,707	872	.....	.....
	8	462	2,772	1,728	13,100	1,019	.....	.....
	9	528	3,168	2,016	14,500	1,126	.....	.....
	10	594	3,564	2,304	15,900	1,235	.....	.....
	11	660	3,960	2,592	17,300	1,343	.....	.....
	12	726	4,356	2,880	18,700	1,451	.....	.....
	13	792	4,752	3,168	20,100	1,559	.....	.....
	14	858	5,148	3,456	21,500	1,669	.....	.....

N. B.—The ratings above are for steam. The water ratings of these boilers should be based directly upon the steam ratings given above, and may be estimated in direct proportion to the temperature at which it is proposed to carry the radiation.

CAPITOL

HOT WATER

HEATER.



SINGLE FIRE-POT SIZES.

No.	Square feet of Radiation Heater will carry in Building besides Mains.	Height in inches.	Width in inches.	Depth in inches.	Regular Flow Connections, (returns duplicate)	Diam. of Smoke Pipe, inches.	Size of Grate.	Shipping Weight, Pounds.	PRICE, F. O. B. Detroit.	Discount,..... per cent. Net Price.
301	400	63	28	22	2-2 in.	8	17 x 17	1700	\$155	.....
302	510	63	28	26		8	17 x 21	2000	180	.....
303	635	63	28	30	2-2 1/2	9	17 x 25	2250	215	.....
304	765	63	28	34		9	17 x 29	2500	240	.....
305	875	63	33	30	2-3 in.	10	22 x 25	2400	270	.....
306	1050	63	33	34		10	22 x 29	2600	320	.....
307	1250	63	33	38	2-2 in.	10	22 x 33	2900	370	.....
308	1425	63	33	42		10	22 x 37	3100	400	.....

DOUBLE FIRE-POT SIZES.

							Each Grate.			
309	1700	74	75	26	3-2 1/2	13	22 x 21	5100	\$465	.....
310	2000	74	75	30		13	22 x 25	5800	535	.....
311	2400	74	75	34	3-3 in.	14	22 x 29	6500	640	.....
312	2700	74	75	38		14	22 x 33	7100	675	.....
313	3000	74	75	42		14	22 x 37	7700	750	.....

THE "FOUR HUNDRED" CAPITOL.

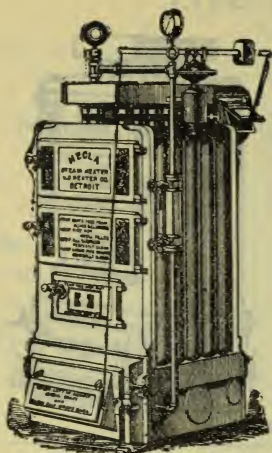
SINGLE FIRE-POT SIZES.

405	1600	66	40	40	3-4 in.	12	26 x 30	3200	\$ 400	.....
406	1850	66	40	45		12	26 x 35	3500	500	.....
407	2100	66	40	50		12	26 x 40	3800	600	.....

DOUBLE FIRE POT SIZES.

409	3400	77	102	40	6-4 in.	15	each	7000	\$ 850	.....
410	3900	77	102	45		16	26 x 30	7600	950	.....
411	4400	77	102	50		17	26 x 35	8200	1050	.....

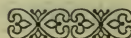
UNITED STATES HEATER CO., Detroit, Mich.



HECLA

STEAM

HEATER.



SINGLE FIRE-POT SIZES.

No.	Square feet of Radiation Heater will carry in Building besides Main.	Height in inches.	Width in inches.	Depth in inches.	Height of Water Line, inches.	Steam Outlets, inches.	Return Inlets, inches.	Diam. of Smoke Pipe, inches.	Size of Grate.	Shipping Weight, Pounds.	PRICE, F. O. B. Detroit.	Discount..... per cent. Net Price.
303½	450	63	33	26	42	2½	2	9	22 x 21	2500	\$235	.....
305	550	63	33	30	42	2½	2	10	22 x 25	2700	275	.....
306	650	63	33	34	42	3	2½	10	22 x 29	2900	310	.....
307	750	63	33	38	42	3	2½	10	22 x 33	3300	325	.....
308	850	63	33	42	42	3	2½	10	22 x 37	3600	340	.....

DOUBLE FIRE-POT SIZES.

									Each Grate.			
310	1100	63	75	30	42	3	2½	13	22 x 25	6200	\$520	.....
311	1300	63	75	34	42	3½	2½	14	22 x 29	6900	590	.....
312	1500	63	75	38	42	4	2½	14	22 x 33	7700	650	.....
313	1700	63	75	42	42	4	2½	14	22 x 37	8500	700	.....

THE "FOUR HUNDRED" HECLA.

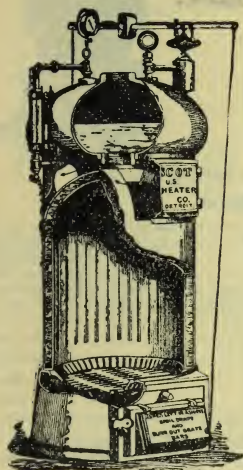
SINGLE FIRE-POT SIZES.

405	1000	66	40	40	50	4	3	12	26 x 30	3600	\$400	.....
406	1150	66	40	45	50	4	3	12	26 x 35	3900	450	.....
407	1300	66	40	50	50	4	3	12	26 x 40	4200	500	.....

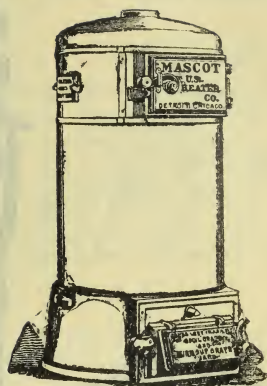
DOUBLE FIRE POT SIZES.

409	2100	66	102	40	50	4	2½	15	each 26 x 30	7600	\$785	.....
410	2400	66	102	45	50	4	2½	16	26 x 35	8200	880	.....
411	2700	66	102	50	50	4½	2½	17	26 x 40	8800	900	.....

UNITED STATES HEATER CO., Detroit, Mich.



THE MASCOT HEATER.



HOT WATER.

No.	SQUARE FEET OF RADI- ATION HEATER WILL CARRY IN BUILDING BESIDES MAINS.	PRICE, F. O. B. DETROIT.	OUTSIDE DIAMETER OF HEATER, INCHES.	HEIGHT OF HEATER, INCHES.	DIAMETER OF GRATE, INCHES.	SIZE OF SMOKE PIPE, INCHES.	SHIPPING WEIGHT, POUNDS.
15	275	\$ 90	23	47	15	8	700
18	375	115	26	47	18	8	800
21	475	140	29	50	21	8	900

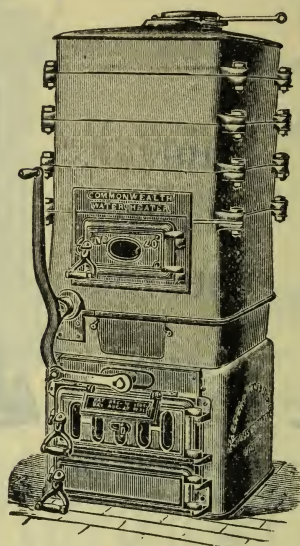
STEAM.

115	175	\$110	23	53	15	8	800
118	250	135	26	53	18	8	900
121	350	160	29	56	12	8	1000

UNITED STATES HEATER CO., Detroit, Mich.

THE COMMONWEALTH HEATER

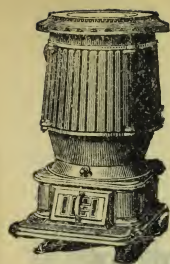
FOR HOT WATER.



NUMBER.	18	20	22	24	28
Diameter of firepot, inches	19	19	22	24	27
Grate area, square inches.....	284	284	380	452	573
Weight, pounds	1234	1492	1822	2553	2950
Height, inches.....	51	57	63	63½	70
Width, inches	29	29	29	34	34
Depth, inches	28	28	30	33	36
Size inlet and outlet, inches	4	4	4	5	5
Fire surface, square feet	24	39	55	90	118
Capacity, square feet direct radiation, including pipes, in ordinary house heating	460	520	640	800	960
List price, with shovel, poker, damper, bolts and packings complete	\$120	\$150	\$180	\$210	\$250
Discount					
Cost					
Price.....					

Round firepot, half brick-lined; planed joints between sections, packed with paper and red lead. All heaters have ash-sifting grates. All sections are tested at 100 pounds to the square inch. One inlet, at the back; one outlet, at the top.

WALKER & PRATT MFG. CO., 31 Union Street,
BOSTON, MASS.



"SMALL SERIES"

WATER HEATERS.

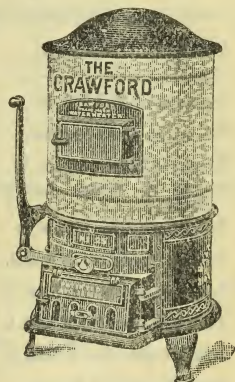
NUMBER.	0	1	2	4
Height, inches	26½	29¾	35½	40½
Largest diameter, inches	14	14¼	18	23¼
Size inlet and outlet, inches	1	1¼	1½	3
Capacity in lineal feet 4-inch pipe	50	75	150	300
Capacity for heating water, gallons per hour, from 60° to 150°	35	50	100	200
List price	\$15.00	\$20.00	\$35.00	\$50.00
Discount				
Cost				
Price				

Round firepot, half brick lined. Seamless one-piece water section, tested at 150 pounds to the square inch.

THE CRAWFORD HEATER.

FOR WATER.

FOR STEAM.



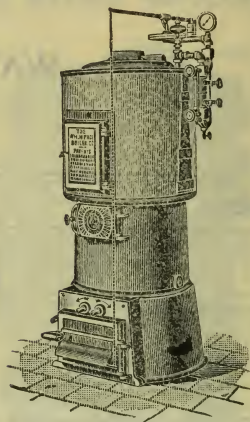
NUMBER.	For Water.		For Steam.	
	25	30	26	31
Diameter of firepot, inches	17½	21	17½	21
Grate area, square inches	241	346	241	346
Weight, pounds	600	850	700	1010
Height, inches	48	53	59	62
Diameter of casing, inches	22½	26½	22½	26½
Size inlet and outlet, inches	3	4	3	4
Capacity, lineal feet 4-inch pipe	400	550		
Capacity, square feet direct radiation, including pipes, in ordinary house heating	320	440	200	300
List price, with shovel, poker, casing and damper	\$75.00	\$100.00	\$96.00	\$126.00
Discount				
Cost				
Price				

Round firepot, half brick lined. Seamless one-piece water section, tested to 150 pounds to the square inch. Galvanized sheetiron casing, with castiron cover.

WALKER & PRATT MFG. CO., 31 Union Street,
BOSTON, MASS.

VOLUNTEER.

Portable,
Surface
Burning.



Steam or
Hot Water.

Numbers.....	*1	2	4	6	8	10	12
Diameter of Fire Pot, in....	15	15	18	21	25	30	36
No. sq. in. Grate Surface....	177	177	254	346	490	707	1,018
Height of Boiler, Steam, in..	....	60	60	66	66	68	74
Height to Water Line, } Steam, in..... }	....	51	51½	56¼	60	61	63¾
Height of Boiler, Water, in..	43	50	52	58	59	62	67
Outlets, Steam, No. & Size, in	....	Two, 2	Two, 2	Two, 2	Two, 2½	Two, 3	Two, 3
Inlets, Steam, No. & Size, in.	....	Two, 1½	Two, 1½	Two, 1½	Two, 1½	Two, 1½	Two, 1½
Outlets, Water, No. & Size, in	Two, 1½	Two, 2	Two, 2	Four, 2	Six, 2	Six, 2½	Four, 3
Inlets, Water, No. & Size, in.	Two, 1½	One, 3	One, 3	Two, 2½	Three, 2½	Three, 2½	Four, 3
Diameter, Smoke Pipe, in...	5	6	6	7	8	8	10
No. sq. ft. Direct Radia- } tion, Steam..... }	....	150	225	350	550	800	1,500
No. sq. ft. Direct Radia- } tion, Water..... }	200	300	400	550	800	1,200	2,000
List, including Trimmings, } Steam..... }	....	\$135	\$180	\$230	\$300	\$375	\$500
Cost.....	....	....	....	....	....	....	....
Price.....	....	....	....	....	....	....	....
List, including Regulator, } Water..... }	\$100	\$120	\$160	\$200	\$280	\$350	\$475
Cost.....	....	....	....	....	....	....	....
Price.....	....	....	....	....	....	....	....

* No. 1 made for water only.

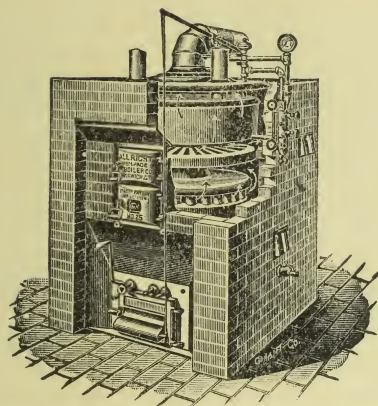
Hot Water Boilers regulate draft automatically.

Nos. 1 and 2 with base for setting on floor, \$5.00 extra.

THE WM. H. PAGE BOILER CO., Norwich, Conn.

ALL RIGHT.

Brick Set,
Surface
Burning.



Hot Water
or Steam.

Numbers.....	18	21	25	30
Diameter of Fire Pot, in.....	18	21	25	30
No. sq. in. Grate Surface.....	254	346	490	707
Height of Boiler, Steam, in.....	63	65	65	66
Height to Water Line, Steam, in.....	49½	52¼	53	53½
Height of Boiler, Water, in.....	54	55	55	56
Outlets, Steam, Number and Size, in....	Two, 2	Two, 2	Two, 2½	Two, 3
Inlets, Steam, Number and Size, in.....	Two, 1½	Two, 1½	Two, 1½	Two, 1½
Outlets, Water, Number and Size, in....	Four, 2	Six, 2	Six, 2	Four, 3
Inlets, Water, Number and Size, in.....	Two, 2½	Two, 2½	Two, 3	Four, 3
Diameter, Smoke Pipe, in.....	7	8	8	10
Number Brick required, Steam.....	700	800	1,000	1,200
Number Brick required, Water.....	600	750	950	1,150
No. sq. ft. Direct Radiation, Steam.....	250	350	550	900
No. sq. ft. Direct Radiation, Water.....	400	600	900	1,400
List, including Trimmings, Steam.....	\$165	\$210	\$290	\$375
Cost.....	....	....	....	....
Price.....	....	....	....	....
List, including Regulator, Water.....	\$150	\$190	\$270	\$350
Cost.....	....	....	....	....
Price.....	....	....	....	....

Hot Water Boilers regulate draft automatically.

THE WM. H. PAGE BOILER CO.,
Norwich, Conn.

USEFUL INFORMATION.

STEAM.

A CUBIC inch of water evaporated under ordinary atmospheric pressure is converted into 1 cubic foot of steam (approximately).

The specific gravity of steam (at atmospheric pressure) is .411 that of air at 34° Fahrenheit, and .0006 that of water at same temperature.

27,222 cubic feet of steam weigh 1 pound; 13,817 cubic feet of air weigh 1 pound.

Locomotives average a consumption of 3,000 gallons of water per 100 miles run.

The best designed boilers, well set, with good draft and skilful firing, will evaporate from 7 to 10 lbs. of water per pound of first-class coal.

In calculating horse-power of Tubular or Flue boilers, consider 15 square feet of heating surface equivalent to one nominal horse-power.

On one square foot of grate can be burned on an average from 10 to 12 lbs. of hard coal, or 18 to 20 lbs. of soft coal, per hour, with natural draft. With forced draft nearly double these amounts can be burned.

Steam Engines, in economy, vary from 14 to 60 lbs. of feed water and from 1½ to 7 lbs. of coal per hour per indicated H. P. See table below for duty of high grade engines.

Condensing engines require from 20 to 30 gallons of water, at an average low temperature to condense the steam represented by every gallon of water evaporated in the boilers' supplying engines—approximately for most engines, we say, from 1 to 1½ gallons condensing water per minute per indicated horse-power.

Surface Condensers should have about 2 square feet of tube (cooling) surface per horse-power for a compound steam engine. Ordinary engines will require more surface according to their economy in the use of steam. It is absolutely necessary to place air pumps below condensers to get satisfactory results.

RATIO OF VACUUM TO TEMPERATURE (FAHRENHEIT) OF FEED WATER.

00 inches, Vacuum.....212°	22½ inches, Vacuum.....150°	28½ inches, Vacuum.....92°
11 " "190°	*25 " "135°	29 " "72°
18 " "170°	27½ " "112°	29½ " "52°

* Usually considered the standard point of efficiency—Condenser and Air Pump being well proportioned.

WEIGHT AND COMPARATIVE FUEL VALUE OF WOOD.

1 Cord Air-dried Hickory or Hard Maple weighs about 4,500 lbs., and is equal to about 2,000 lbs. coal.

1 " " White Oak weighs about 3,850 lbs., and is equal to about 1,715 lbs. coal.

1 " " Beech, Red Oak, and Black Oak weighs about 3,250 lbs., and is equal to about 1,450 lbs. coal.

1 " " Poplar (whitewood), Chestnut, and Elm weighs about 2,350 lbs., and is equal to about 1,050 lbs. coal.

1 " " Average Pine weighs about 2,000 lbs., and is equal to about 925 lbs. coal.

From the above it is safe to assume that 2½ lbs. of dry wood is equal to 1 lb. average quality of soft coal, and that the full value of the same weight of different woods is very nearly the same—that is, a pound of hickory is worth no more for fuel than a pound of pine, assuming both to be dry. It is important that the wood be dry, as each 10 per cent. of water or moisture in wood will detract about 12 per cent. from its value as fuel.

DUTY OF STEAM ENGINES.

A well-known engineer of high authority gives the following comparative figures showing the economy of high grade steam engines in actual practice:

Type of Engine.	Temperature of Feed Water.	Lbs. of Water Evaporated per lb. or Cumberland Coal.	Pounds of Steam per 1 H. P. used per hour.	Pounds of Cumberland Coal used per 1 H. P. per hour.	Cost per 1 H. P. per hour, supposing Coal at \$6.00 per ton.
Non-Condensing.....	210°	10.5	29.	2.75	\$0.0073
Condensing.....	100°	9.4	20.	2.12	0.0056
Compound Jacketed.....	100°	9.4	17.	1.81	0.0045
Triple Expansion Jacketed.	100°	9.4	13.6	1.44	0.0030

**The effect of a good condenser and air pump should be to make available about 10 lbs. more mean effective pressure than the same terminal pressure; or to give the same mean effective pressure with a correspondingly less terminal pressure. When the load on the engine requires 20 lbs. M. E. P., the condenser does half the work; at 30 lbs., one third of the work; at 40 lbs., one fourth, and so on. It is safe to assume that practically the condenser will save from one fourth to one third of the fuel, and it can be applied to any engine cut-off, or throttling, where a sufficient supply of water is available.

THE ABOVE IS FROM WALWORTH MFG. CO.'S POCKET PRICE-LIST BY PERMISSION.

WATER.

DOUBLING the diameter of a pipe increases its capacity four times. Friction of liquids in pipes increases as the square of the velocity.

The mean pressure of the atmosphere is usually estimated at 14.7 lbs. per square inch, so that with a perfect vacuum it will sustain a column of mercury 29.9 inches or a column of water 33.9 feet high at sea level.

To find the pressure in pounds per square inch of a column of water, multiply the height of the column in feet by .434. Approximately, we say that every foot elevation is equal to $\frac{1}{2}$ lb. pressure per square inch; this allows for ordinary friction.

To find the diameter of a pump cylinder to move a given quantity of water per minute (100 feet of piston being the standard of speed), divide the number of gallons by 4, then extract the square root, and the product will be the diameter in inches of the pump cylinder.

To find quantity of water elevated in one minute running at 100 feet of piston speed per minute, square the diameter of the water cylinder in inches and multiply by 4. Example: Capacity of a 5 inch cylinder is desired. The square of the diameter (5 inches) is 25, which, multiplied by 4, gives 100, the number of gallons per minute (approximately).

To find the horse power necessary to elevate water to a given height, multiply the weight of the water elevated per minute in pounds by the height in feet, and divide the product by 33,000 (an allowance should be added by water friction, and a further allowance for loss in steam cylinder, say from 20 to 30 per cent).

The area of the Steam Piston multiplied by the steam pressure gives the total amount of pressure that can be exerted. *The area of the water piston* multiplied by the pressure of water per square inch gives the resistance. *A margin* must be made between the *power* and the *resistance* to move the pistons at the required speed—say from 20 to 40 per cent., according to speed and other conditions.

To find the capacity of a cylinder in gallons. Multiplying the area in inches by the length of stroke in inches will give the total number of cubic inches; divide this amount by 231 (which is the cubical contents of a U. S. gallon in inches) and the product is the capacity in gallons.

WEIGHT AND CAPACITY OF DIFFERENT STANDARD GALLONS OF WATER.

	Cubic Inches in a Gallon.	Weight of a Gal- lon in pounds.	Gallons in a Cubic Foot.	
Imperial or English	277.274	10.00	6.232102	Weight of a cubic foot of water, English stand- ard, 62.321 lbs. Avordupois.
United States.....	231.	8.33111	7.480519	

Weight of Crude Petroleum, $6\frac{1}{2}$ lbs. per U. S. gallon, }
 Weight of Refined ,, $6\frac{1}{2}$ lbs. per U. S. gallon, } 42 gallons to the barrel.

A "miner's inch" of water is approximately equal to a supply of 12 U. S. gallons per minute.

FIRE STREAMS.

Pressures required at nozzle and at pump, with quantity and pressure of water necessary to throw water various distances through different sized nozzles—using $2\frac{1}{2}$ inch rubber hose and smooth nozzles.

G. A. ELLIS, C. E.

Size of Nozzles.	1 Inch.				$1\frac{1}{2}$ Inch.				$1\frac{1}{4}$ Inch.				$1\frac{3}{4}$ Inch.			
Pressure at nozzle.....	40	60	80	100	40	60	80	100	40	60	80	100	40	60	80	100
*Pressure at Pump or Hydrant with 100 ft. $2\frac{1}{2}$ inch rubber hose. }	48	73	97	121	54	81	108	135	61	92	123	154	71	107	144	180
Gallons per minute....	155	189	219	245	196	240	277	310	242	297	342	383	293	358	413	462
Horizontal dist. thrown	109	142	168	186	113	148	175	193	118	156	186	207	124	166	200	224
Vertical dist. thrown...	79	108	131	148	81	112	137	157	82	115	142	164	85	118	146	169

*For greater lengths of $2\frac{1}{2}$ hose the increased friction can readily be obtained by noting the differences between the above given "pressure at nozzle" and "pressure at pump or hydrant with 100 feet of hose." For instance, if it requires at hydrant or pump 8 lbs. more pressure than it does at nozzle to overcome the friction when pumping through 100 feet of $2\frac{1}{2}$ inch hose (using 1 inch nozzle, with 40 lb. pressure at said nozzle), then it requires 16 lbs. pressure to overcome the friction in forcing through 200 feet of same size hose.

THE ABOVE IS FROM WALWORTH MFG. CO.'S POCKET PRICE-LIST BY PERMISSION.

SIZES OF FLOW AND RETURN PIPES APPROXIMATELY PROPORTIONED TO SURFACE IN RADIATORS.*

Size of Pipe. Nominal Diameter, Inches.	MAINS.		BRANCHES AND RISERS.			
	Square feet of surface in in- direct radiators in cellar or basement.	Square feet of surface in direct radiators on one or more floors. Average.	Square feet of surface in radi- ators on first floor, or 10 ft. to 15 ft. above level of fire in circula- tor.	Square feet of surface in radi- ators on second floor, or 15 ft. to 25 ft. above level of fire in circula- tor.	Square feet of surface in radi- ators on third floor, or 25 ft. to 35 ft. above level of fire in circula- tor.	Square feet of surface in radi- ators on fourth floor, or 35 ft. to 45 ft. above level of fire in circula- tor.
$\frac{3}{4}$				40	45	50
1			50	75	80	85
1 $\frac{1}{4}$	100	135	110	120	135	150
1 $\frac{1}{2}$	135	220	180	195	210	230
2	225	350	290	320	350	370
2 $\frac{1}{2}$	320	460	400	490	525	550
3	500	675	620	650	690	730
3 $\frac{1}{2}$	650	850	820	870	920	970
4	850	1100	1050	1120	1185	1250
4 $\frac{1}{2}$	1050	1350	1325	1400	1485	1560
5	1350	1700				
6	2900	3600				
7	3900	4800				
8	5000	6200				
9	6300	7700				
10	7900	9800				
11	9500	11800				
12	11400	14000				

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* TABLE XLII.—EQUALIZATION OF PIPE AREAS.

Sizes of Pipes.	$\frac{1}{2}$ In.	$\frac{3}{4}$ In.	1 In.	1 $\frac{1}{4}$ In.	1 $\frac{1}{2}$ In.	2 In.	2 $\frac{1}{2}$ In.	3 In.	3 $\frac{1}{2}$ In.	4 In.	4 $\frac{1}{2}$ In.	5 In.	6 In.	7 In.	8 In.
$\frac{1}{2}$ Inch.....	1.	1.7	2.8	4.9	6.6	11.	15.6	24.	32.	41.	52.	65.	94.	123.	167.
$\frac{3}{4}$ Inch.....	1.	1.	1.6	2.6	3.8	6.2	8.9	13.8	18.	23.	30.	37.	54.	72.	93.
1 Inch.....	1.	1.	1.	1.7	2.3	3.8	5.5	8.5	11.	14.	18.	23.	33.	44.	57.
1 $\frac{1}{4}$ Inch.....	1.	1.	1.	1.	1.3	2.2	3.1	4.9	6.6	8.	10.	13.	19.	25.	33.
1 $\frac{1}{2}$ Inch.....	1.	1.	1.	1.	1.	1.6	2.3	3.6	4.8	6.2	7.7	9.7	14.	19.	24.
2 Inch.....						1.	1.4	2.2	2.9	3.8	4.7	5.3	8.6	11.	14.
2 $\frac{1}{2}$ Inch.....							1.	1.5	2.	2.6	3.3	4.1	6.	8.	10.
3 Inch.....								1.	1.3	1.7	2.1	2.7	3.9	5.2	6.7
3 $\frac{1}{2}$ Inch.....									1.	1.2	1.6	2.	2.9	3.9	5.
4 Inch.....										1.	1.2	1.5	2.2	3.	3.9
4 $\frac{1}{2}$ Inch.....											1.	1.2	1.8	2.4	3.1
5 Inch.....												1.	1.4	1.9	2.5
6 Inch.....													1.	1.3	1.7
7 Inch.....														1.	1.2
Internal Areas of Pipes.	.3048	.5333	.8627	1.496	2.038	3.355	4.783	7.388	9.887	12.73	15.93	19.99	28.88	38.73	50.03

* The above tables are taken from Abraham Cox Co.'s catalogue, "Novelty Circulator," by permission.

RELATIVE CAPACITIES OF PIPES FOR CONVEYING OR DISCHARGING LIQUIDS AND GASES.

Diam.	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	5	6	7	8	9	10	12	Diam.
$\frac{3}{4}$	1	2.05	3.57	5.66	11.61	20.40	31.98	47.91	66.45	88.00	112.00	138.00	166.00	196.00	229.00	265.00	1
1	1.00	1.00	1.74	2.75	5.66	9.87	15.57	23.00	32.00	43.00	56.00	71.00	88.00	108.00	131.00	157.00	1 $\frac{1}{4}$
1 $\frac{1}{4}$	1.00	1.00	1.00	1.57	3.21	5.66	8.95	13.21	18.39	25.12	33.67	44.00	56.00	69.00	84.00	101.00	1 $\frac{1}{2}$
1 $\frac{1}{2}$	1.00	1.00	1.00	1.00	2.05	3.57	5.66	8.39	11.61	16.28	22.18	29.04	37.00	46.00	56.00	68.00	2
2	1.00	1.00	1.00	1.00	1.00	1.74	2.75	4.06	5.66	7.97	10.57	13.99	18.39	23.00	28.00	34.00	2 $\frac{1}{2}$
2 $\frac{1}{2}$	1.00	1.00	1.00	1.00	1.00	1.00	1.57	2.32	3.24	4.56	6.16	8.13	10.57	13.61	17.28	21.69	3
3	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.47	2.05	2.83	3.83	5.06	6.61	8.43	10.57	13.18	3 $\frac{1}{2}$
3 $\frac{1}{2}$	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.39	1.94	2.73	3.66	4.80	6.16	7.81	9.87	4
4	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.74	2.45	3.32	4.36	5.66	7.29	9.28	4 $\frac{1}{2}$
5	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.57	2.32	3.24	4.24	5.66	7.29	5
6	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.47	2.05	2.75	3.57	4.56	6
7	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.39	1.88	2.43	3.18	7
8	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.74	2.25	8
9	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.20	1.57	9
10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	10

The capacity of a pipe is in inverse proportion to the square root of its length.

Doubling the diameter of a pipe increases its capacity 5.66 times.

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CIRCUMFERENCES AND AREAS OF CIRCLES.

Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.
$\frac{1}{2}$	.0081	.00076	$\frac{7}{2}$	23.56	44.178	16	50.26	201.06	$24\frac{1}{2}$	76.96	471.43
$\frac{3}{4}$	.0036	.00306		23.95	45.663		50.65	204.21		77.36	476.25
$\frac{1}{2}$	.0326	.01227	$\frac{7}{2}$	24.34	47.173	$16\frac{1}{2}$	51.05	207.39	$24\frac{1}{2}$	77.75	481.10
$\frac{3}{4}$	.0589	.02761		24.74	48.707		51.44	210.59		78.14	485.97
$\frac{1}{2}$	.7854	.04908	8	25.13	50.265	$16\frac{1}{2}$	51.83	213.82	25	78.54	490.87
$\frac{1}{2}$	.9817	.07669		25.52	51.848		52.22	217.07		78.93	495.79
$\frac{3}{4}$	1.178	.1104	$8\frac{1}{2}$	25.91	53.456	$16\frac{3}{4}$	52.62	220.35	$25\frac{1}{2}$	79.32	500.74
$\frac{1}{2}$	1.374	.1503		26.31	55.088		53.01	223.65		79.71	505.71
$\frac{3}{4}$	1.570	.1963	$8\frac{1}{2}$	26.70	56.745	17	53.40	226.98	$25\frac{1}{2}$	80.10	510.70
$\frac{1}{2}$	1.767	.2485		27.09	58.426		53.79	230.33		80.50	515.72
$\frac{1}{2}$	1.963	.3097	$8\frac{3}{4}$	27.48	60.132	$17\frac{1}{4}$	54.19	233.70	$25\frac{3}{4}$	80.89	520.70
$\frac{3}{4}$	2.159	.3712		27.88	61.862		54.58	237.10		81.28	525.83
$\frac{1}{2}$	2.356	.4417	9	28.27	63.617	$17\frac{1}{2}$	54.97	240.52	26	81.68	530.93
$\frac{3}{4}$	2.552	.5184		28.66	65.396		55.37	243.97		82.07	536.04
$\frac{1}{2}$	2.748	.6013	$9\frac{1}{4}$	29.05	67.200	$17\frac{3}{4}$	55.76	247.45	$26\frac{1}{4}$	82.46	541.18
$\frac{1}{2}$	2.945	.6902		29.45	69.029		56.16	250.94		82.85	546.35
1	3.141	.7854	$9\frac{1}{2}$	29.84	70.882	18	56.54	254.46	$26\frac{1}{2}$	83.25	551.54
	3.534	.9940		30.23	72.759		56.94	258.01		83.64	556.76
$1\frac{1}{4}$	3.927	1.227	$9\frac{3}{4}$	30.63	74.662	$18\frac{1}{4}$	57.33	261.58	$26\frac{3}{4}$	84.03	562.00
	4.319	1.484		31.02	76.588		57.72	265.18		84.43	567.26
$1\frac{1}{2}$	4.712	1.767	10	31.41	78.539	$18\frac{1}{2}$	58.11	268.80	27	84.82	572.55
	5.105	2.073		31.80	80.515		58.51	272.44		85.21	577.87
$1\frac{3}{4}$	5.497	2.405	$10\frac{1}{4}$	32.20	82.516	$18\frac{3}{4}$	58.90	276.11	$27\frac{1}{4}$	85.60	583.20
	5.890	2.761		32.59	84.540		59.29	279.81		86.00	588.57
2	6.283	3.141	$10\frac{1}{2}$	32.98	86.590	19	59.69	283.52	$27\frac{1}{2}$	86.39	593.95
	6.675	3.546		33.37	88.664		60.08	287.27		86.78	599.37
$2\frac{1}{4}$	7.068	3.976	$10\frac{3}{4}$	33.77	90.762	$19\frac{1}{4}$	60.47	291.03	$27\frac{3}{4}$	87.17	604.80
	7.461	4.430		34.16	92.885		60.86	294.83		87.57	610.26
$2\frac{1}{2}$	7.854	4.908	11	34.55	95.033	$19\frac{1}{2}$	61.26	298.64	28	87.96	615.75
	8.246	5.411		34.95	97.205		61.65	302.48		88.35	621.26
$2\frac{3}{4}$	8.639	5.939	$11\frac{1}{4}$	35.34	99.402	$19\frac{3}{4}$	62.04	306.35	$28\frac{1}{4}$	88.75	626.79
	9.032	6.491		35.73	101.62		62.43	310.24		89.14	632.35
3	9.424	7.068	$11\frac{1}{2}$	36.12	103.86	20	62.83	314.16	$28\frac{1}{2}$	89.53	637.94
	9.817	7.669		36.52	106.13		63.22	318.09		89.92	643.54
$3\frac{1}{4}$	10.21	8.295	$11\frac{3}{4}$	36.91	108.43	$20\frac{1}{4}$	63.61	322.06	$28\frac{3}{4}$	90.32	649.18
	10.60	8.946		37.30	110.75		64.01	326.05		90.71	654.83
$3\frac{1}{2}$	10.99	9.621	12	37.69	113.09	$20\frac{1}{2}$	64.40	330.06	29	91.10	660.52
	11.38	10.320		38.09	115.46		64.79	334.10		91.49	666.22
$3\frac{3}{4}$	11.78	11.044	$12\frac{1}{4}$	38.48	117.85	$20\frac{3}{4}$	65.18	338.16	$29\frac{1}{4}$	91.89	671.95
	12.17	11.793		38.87	120.27		65.58	342.25		92.28	677.71
4	12.56	12.566	$12\frac{1}{2}$	39.27	122.71	21	65.97	346.36	$29\frac{1}{2}$	92.67	683.49
	12.95	13.364		39.66	125.18		66.36	350.49		93.06	689.29
$4\frac{1}{4}$	13.35	14.186	$12\frac{3}{4}$	40.05	127.67	$21\frac{1}{4}$	66.75	354.65	$29\frac{3}{4}$	93.46	695.12
	13.74	15.033		40.44	130.19		67.15	358.84		93.85	700.98
$4\frac{1}{2}$	14.13	15.904	13	40.84	132.73	$21\frac{1}{2}$	67.54	363.05	30	94.24	706.86
	14.52	16.800		41.23	135.29		67.93	367.28		94.64	712.76
$4\frac{3}{4}$	14.92	17.720	$13\frac{1}{4}$	41.62	137.88	$21\frac{3}{4}$	68.32	371.54	$30\frac{1}{4}$	95.03	718.69
	15.31	18.665		42.01	140.50		68.72	375.82		95.42	724.64
5	15.70	19.635	$13\frac{1}{2}$	42.41	143.13	22	69.11	380.13	$30\frac{1}{2}$	95.81	730.61
	16.10	20.629		42.80	145.80		69.50	384.46		96.21	736.61
$5\frac{1}{4}$	16.49	21.647	$13\frac{3}{4}$	43.19	148.48	$22\frac{1}{4}$	69.90	388.82	$30\frac{3}{4}$	96.60	742.64
	16.88	22.690		43.58	151.20		70.29	393.20		96.99	748.69
$5\frac{1}{2}$	17.27	23.758	14	43.98	153.93	$22\frac{1}{2}$	70.68	397.60	31	97.38	754.76
	17.67	24.850		44.37	156.69		71.07	402.03		97.78	760.86
$5\frac{3}{4}$	18.06	25.967	$14\frac{1}{4}$	44.76	159.48	$22\frac{3}{4}$	71.47	406.49	$31\frac{1}{4}$	98.17	766.99
	18.45	27.108		45.16	162.29		71.86	410.97		98.56	773.14
6	18.84	28.274	$14\frac{1}{2}$	45.55	165.13	23	72.25	415.47	$31\frac{1}{2}$	98.96	779.31
	19.24	29.464		45.94	167.98		72.64	420.00		99.35	785.51
$6\frac{1}{4}$	19.63	30.679	$14\frac{3}{4}$	46.33	170.87	$23\frac{1}{4}$	73.04	424.55	$31\frac{3}{4}$	99.74	791.73
	20.02	31.919		46.73	173.78		73.43	429.13		100.1	797.97
$6\frac{1}{2}$	20.42	33.183	15	47.12	176.71	$23\frac{1}{2}$	73.82	433.73	32	100.5	804.24
	20.81	34.471		47.51	179.67		74.21	438.30		100.9	810.54
$6\frac{3}{4}$	21.20	35.784	$15\frac{1}{4}$	47.90	182.72	$23\frac{3}{4}$	74.61	443.01	$32\frac{1}{4}$	101.3	816.86
	21.57	37.122		48.30	185.66		75.00	447.69		101.7	823.21
7	21.99	38.484	$15\frac{1}{2}$	48.69	188.69	24	75.39	452.39	$32\frac{1}{2}$	102.1	829.57
	22.38	39.871		49.08	191.74		75.79	457.11		102.4	835.97
$7\frac{1}{4}$	22.77	41.282	$15\frac{3}{4}$	49.48	194.82	$24\frac{1}{4}$	76.18	461.86	$32\frac{3}{4}$	102.8	842.39
	23.16	42.718		49.87	197.73		76.57	466.63		103.2	848.83

FROM THE JOHN DAVIS CO.'S CATALOGUE, BY PERMISSION.

CIRCUMFERENCES AND AREAS OF CIRCLES.

CONTINUED.

Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.
33	103.6	855.30	41½	130.3	1352.6	50	157.0	1963.5	58½	183.7	2687.8
	104.0	861.79		130.7	1360.8		157.4	1973.3		184.1	2699.3
33¼	104.4	868.30	41¾	131.1	1369.0	50¼	157.8	1983.1	58¾	184.5	2710.8
	104.8	874.88		131.5	1377.2		158.2	1993.0		184.9	2722.4
33½	105.2	881.41	42	131.9	1385.4	50½	158.6	2002.9	59	185.3	2733.9
	105.6	888.00		132.3	1393.7		159.0	2012.8		185.7	2745.5
33¾	106.0	894.61	42¼	132.7	1401.9	50¾	159.4	2022.8	59¼	186.1	2757.1
	106.4	901.25		133.1	1410.2		159.8	2032.8		186.5	2768.8
34	106.8	907.92	42½	133.5	1418.6	51	160.2	2042.8	59½	186.9	2780.5
	107.2	914.61		133.9	1426.9		160.6	2052.8		187.3	2792.2
34¼	107.6	921.32	42¾	134.3	1435.3	51¼	161.0	2062.9	59¾	187.7	2803.9
	107.9	928.06		134.6	1443.7		161.3	2072.9		188.1	2815.6
34½	108.3	934.82	43	135.0	1452.2	51½	161.7	2083.0	60	188.4	2827.4
	108.7	941.60		135.4	1460.6		162.1	2093.2		188.8	2839.2
34¾	109.1	948.41	43¼	135.8	1469.1	51¾	162.5	2103.3	60¼	189.2	2851.0
	109.5	955.25		136.2	1477.6		162.9	2113.5		189.6	2862.8
35	109.9	962.11	43½	136.6	1486.1	52	163.3	2123.7	60½	190.0	2874.7
	110.3	968.99		137.0	1494.7		163.7	2133.9		190.4	2886.6
35¼	110.7	975.90	43¾	137.4	1503.3	52¼	164.1	2144.1	60¾	190.8	2898.5
	111.1	982.84		137.8	1511.9		164.5	2154.4		191.2	2910.5
35½	111.5	989.80	44	138.2	1520.5	52½	164.9	2164.7	61	191.6	2922.4
	111.9	996.78		138.6	1529.1		165.3	2175.0		192.0	2934.4
35¾	112.3	1003.7	44¼	139.0	1537.8	52¾	165.7	2185.4	61¼	192.4	2946.4
	112.7	1010.8		139.4	1546.5		166.1	2195.7		192.8	2958.5
36	113.0	1017.8	44½	139.8	1555.2	53	166.5	2206.1	61½	193.2	2970.5
	113.4	1024.9		140.1	1564.0		166.8	2216.6		193.6	2982.6
36¼	113.8	1032.0	44¾	140.5	1572.8	53¼	167.2	2227.0	61¾	193.9	2994.7
	114.2	1039.1		140.9	1581.6		167.6	2237.5		194.3	3006.9
36½	114.6	1049.3	45	141.3	1590.4	53½	168.0	2248.0	62	194.7	3019.0
	115.0	1053.5		141.7	1599.2		168.4	2258.5		195.1	3031.2
36¾	115.4	1060.7	45¼	142.1	1608.1	53¾	168.8	2269.0	62¼	195.5	3043.4
	115.8	1067.9		142.5	1617.0		169.2	2279.6		195.9	3055.7
37	116.2	1075.2	45½	142.9	1625.9	54	169.6	2290.2	62½	196.3	3067.9
	116.6	1082.4		143.3	1634.9		170.0	2300.8		196.7	3080.2
37¼	117.0	1089.7	45¾	143.7	1643.8	54¼	170.4	2311.4	62¾	197.1	3092.5
	117.4	1097.1		144.1	1652.8		170.8	2322.1		197.5	3104.8
37½	117.8	1104.4	46	144.5	1661.9	54½	171.2	2332.8	63	197.9	3117.2
	118.2	1111.8		144.9	1670.9		171.6	2343.5		198.3	3129.6
37¾	118.6	1119.2	46¼	145.2	1680.0	54¾	172.0	2354.2	63¼	198.7	3142.0
	118.9	1126.6		145.6	1689.1		172.3	2365.0		199.0	3144.4
38	119.3	1134.1	46½	146.0	1698.2	55	172.7	2375.8	63½	199.4	3166.9
	119.7	1141.5		146.4	1707.3		173.1	2386.6		199.8	3179.4
38¼	120.1	1149.0	46¾	146.8	1716.5	55¼	173.5	2397.4	63¾	200.2	3191.9
	120.5	1156.6		147.2	1725.7		173.9	2408.3		200.6	3204.4
38½	120.9	1164.1	47	147.6	1734.9	55½	174.3	2419.2	64	201.0	3216.9
	121.3	1171.7		148.0	1744.1		174.7	2430.1		201.4	3229.5
38¾	121.7	1179.3	47¼	148.4	1753.4	55¾	175.1	2441.0	64¼	201.8	3242.1
	122.1	1186.9		148.8	1762.7		175.5	2452.0		202.2	3254.8
39	122.5	1194.5	47½	149.2	1772.0	56	175.9	2463.0	64½	202.6	3267.4
	122.9	1202.2		149.6	1781.3		176.3	2474.0		203.0	3280.1
39¼	123.3	1209.9	47¾	150.0	1790.7	56¼	176.7	2485.0	64¾	203.4	3292.8
	123.7	1217.6		150.4	1800.1		177.1	2496.1		203.8	3305.5
39½	124.0	1225.4	48	150.7	1809.5	56½	177.5	2507.1	65	204.2	3318.3
	124.4	1233.1		151.1	1818.9		177.8	2518.2		204.5	3331.0
39¾	124.8	1240.9	48¼	151.5	1828.4	56¾	178.2	2529.4	65¼	204.9	3343.8
	125.2	1248.7		151.9	1837.9		178.6	2540.5		205.3	3356.7
40	125.6	1256.6	48½	152.3	1847.4	57	179.0	2551.7	65½	205.7	3369.5
	126.0	1264.5		152.7	1856.9		179.4	2562.9		206.1	3382.4
40¼	126.4	1272.3	48¾	153.1	1866.5	57¼	179.8	2574.1	65¾	206.5	3395.3
	126.8	1280.3		153.5	1876.1		180.2	2585.4		206.9	3408.2
40½	127.2	1288.2	49	153.9	1885.7	57½	180.6	2596.7	66	207.3	3421.2
	127.6	1291.2		154.3	1895.3		181.0	2608.0		207.7	3434.1
40¾	128.0	1304.2	49¼	154.7	1905.0	57¾	181.4	2619.3	66¼	208.1	3447.1
	128.4	1312.2		155.1	1914.7		181.8	2630.7		208.5	3460.1
41	128.8	1320.2	49½	155.5	1924.4	58	182.2	2642.0	66½	208.9	3473.2
	129.2	1328.3		155.9	1934.1		182.6	2653.4		209.3	3486.3
41¼	129.6	1336.4	49¾	156.3	1943.9	58¼	183.0	2664.9	66¾	209.7	3499.3
	129.9	1344.5		156.6	1953.6		183.3	2676.3		210.0	3512.5

FROM THE JOHN DAVIS CO.'S CATALOGUE, BY PERMISSION.

CIRCUMFERENCES AND AREAS OF CIRCLES.

CONCLUDED.

Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.	Diam.	Circ.	Area.
67	210.4	3525.6	75½	237.1	4476.9	84	263.8	5541.7	92½	290.5	6720.0
	210.9	3538.8		237.5	4491.8		264.2	5558.2		290.9	6738.2
67½	211.2	3552.0	75¾	237.9	4506.6	84½	264.6	5574.8	92¾	291.3	6756.4
	211.6	3565.2		238.3	4521.5		265.0	5591.3		291.7	6774.6
67¾	212.0	3578.4	76	238.7	4536.4	84¾	265.4	5607.9	93	292.1	6792.9
67¾	212.4	3591.7		239.1	4551.4		265.8	5624.5		292.5	6811.1
	212.8	3605.0	76¼	239.5	4566.3	84¾	266.2	5641.1	93¼	292.9	6829.4
	213.2	3618.3		239.9	4581.3		266.6	5657.8		293.3	6847.8
68	213.6	3631.6	76½	240.3	4596.3	85	267.0	5674.5	93½	293.7	6866.1
	214.0	3645.0		240.7	4611.3		267.4	5691.2		294.1	6884.5
68¼	214.4	3658.4	76¾	241.1	4626.4	85¼	267.8	5707.9	93¾	294.5	6902.9
	214.8	3671.8		241.5	4641.5		268.2	5724.6		294.9	6921.3
68½	215.1	3685.2	77	241.9	4656.6	85½	268.6	5741.4	94	295.3	6939.7
	215.5	3698.7		242.2	4671.7		268.9	5758.2		295.7	6958.2
68¾	215.9	3712.2	77¼	242.6	4686.9	85¾	269.3	5775.0	94¼	296.0	6976.7
	216.3	3725.7		243.0	4702.1		269.7	5791.9		296.4	6995.2
69	216.7	3739.2	77½	243.4	4717.3	86	270.1	5808.8	94½	296.8	7013.8
	217.1	3752.8		243.8	4732.5		270.5	5825.7		297.2	7032.3
69¼	217.5	3766.4	77¾	244.2	4747.7	86¼	270.9	5842.6	94¾	297.6	7050.9
	217.9	3780.0		244.6	4763.0		271.3	5859.5		298.0	7069.5
69½	218.3	3793.6	78	245.0	4778.3	86½	271.7	5876.5	95	298.4	7088.2
	218.7	3807.3		245.4	4793.7		272.1	5893.5		298.8	7106.9
69¾	219.1	3821.0	78¼	245.8	4809.0	86¾	272.5	5910.5	95¼	299.2	7125.5
	219.5	3834.7		246.2	4824.4		272.9	5927.6		299.6	7144.3
70	219.9	3848.4	78½	246.6	4839.8	87	273.3	5944.6	95½	300.0	7163.0
	220.3	3862.2		247.0	4855.2		273.7	5961.7		300.4	7181.8
70¼	220.6	3875.9	78¾	247.4	4870.7	87¼	274.1	5978.9	95¾	300.8	7200.5
	221.0	3889.8		247.7	4886.1		274.4	5996.0		301.2	7219.4
70½	221.4	3903.6	79	248.1	4901.6	87½	274.8	6013.2	96	301.5	7238.2
	221.8	3917.4		248.5	4917.2		275.2	6030.4		301.9	7257.1
70¾	222.2	3931.3	79¼	248.9	4932.7	87¾	275.6	6047.6	96¼	302.3	7275.9
	222.6	3945.2		249.3	4948.3		276.0	6064.8		302.7	7294.9
71	223.0	3959.2	79½	249.7	4963.9	88	276.4	6082.1	96½	303.1	7313.8
	223.4	3973.1		250.1	4979.5		276.8	6099.4		303.5	7332.8
71¼	223.8	3987.1	79¾	250.5	4995.1	88¼	277.2	6116.7	96¾	303.9	7351.7
	224.2	4001.1		250.9	5010.8		277.6	6134.0		304.3	7370.7
71½	224.6	4015.1	80	251.3	5026.5	88½	278.0	6151.4	97	304.7	7389.8
	225.0	4029.2		251.7	5042.2		278.4	6168.8		305.1	7408.8
71¾	225.4	4043.2	80¼	252.1	5058.0	88¾	278.8	6186.2	97¼	305.5	7427.9
	225.8	4067.3		252.5	5073.7		279.2	6203.6		305.9	7447.0
72	226.1	4071.5	80½	252.8	5089.5	89	279.6	6221.1	97½	306.3	7466.2
	226.5	4085.6		253.2	5105.4		279.9	6238.6		306.6	7485.3
72¼	226.9	4099.8	80¾	253.6	5121.2	89¼	280.3	6256.1	97¾	307.0	7504.5
	227.3	4114.0		254.0	5137.1		280.7	6273.6		307.4	7523.7
72½	227.7	4128.2	81	254.4	5153.0	89½	281.1	6291.2	98	307.8	7542.9
	228.1	4142.5		254.8	5168.9		281.5	6308.8		308.2	7562.2
72¾	228.5	4156.7	81¼	255.2	5184.8	89¾	281.9	6326.4	98¼	308.6	7581.5
	228.9	4171.0		255.6	5200.8		282.3	6344.0		309.0	7600.8
73	229.3	4185.3	81½	256.0	5216.8	90	282.7	6361.7	98½	309.4	7620.1
	229.7	4199.7		256.4	5232.8		283.1	6379.4		309.8	7639.4
73¼	230.1	4214.1	81¾	256.8	5248.8	90¼	283.5	6397.1	98¾	310.2	7658.8
	230.5	4228.5		257.2	5264.9		283.9	6414.8		310.6	7678.2
73½	230.9	4242.9	82	257.6	5281.0	90½	284.3	6432.6	99	311.0	7697.7
	231.3	4257.3		258.0	5297.1		284.7	6450.4		311.4	7717.1
73¾	231.6	4271.8	82¼	258.3	5313.2	90¾	285.1	6468.2	99¼	311.8	7736.6
	232.0	4286.3		258.7	5329.4		285.4	6486.0		312.1	7756.1
74	232.4	4300.8	82½	259.1	5345.6	91	285.8	6503.8	99½	312.5	7775.6
	232.8	4315.3		259.5	5361.8		286.2	6521.7		312.9	7795.2
74¼	233.2	4329.9	82¾	259.9	5378.0	91¼	286.6	6539.6	99¾	313.3	7814.7
	233.6	4344.5		260.3	5494.3		287.0	6557.6		313.7	7834.3
74½	234.0	4359.1	83	260.7	5410.6	91½	287.4	6575.5	100	314.1	7853.9
	234.4	4373.8		261.1	5426.9		287.8	6593.5		314.5	7874.0
74¾	234.8	4388.4	83¼	261.5	5443.2	91¾	288.2	6611.5	100¼	314.9	7893.3
	235.2	4403.1		261.9	5459.6		288.6	6629.5		315.3	7913.1
75	235.6	4417.8	83½	262.3	5476.0	92	289.0	6647.6	100½	315.7	7932.7
	236.0	4432.6		262.7	5492.4		289.4	6665.7		316.0	7942.4
75¼	236.4	4447.3	83¾	263.1	5508.8	92¼	289.8	6683.8	100¾	316.4	7972.2
	236.7	4462.1		263.5	5525.3		290.2	6701.9		316.8	7991.9

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CAPACITIES OF BOILERS.

FOR HOT WATER HEATING APPARATUS.

And capable of maintaining the temperature of the water in the Apparatus at 180° Fahr. over night without attention. (G. E. DIXON.)

Boiler Surface in Square Feet.	Total Direct Radiation in Square Feet.	Direct Radiation Per Sq Foot of Boiler Surface.
20	110	5.50
30	181	6.03
40	257	6.42
50	338	6.76
60	425	7.08
70	512	7.46
80	603	7.54
90	695	7.72
100	792	7.92
120	991	8.26
140	1198	8.56
159	1400	8.80
199	1842	9.25
225	2142	9.52
279	2788	9.99
323	3332	10.31
372	3976	10.68
453	5065	11.18
517	5938	11.48

FOR LOW PRESSURE STEAM HEATING APPARATUS.

And capable of maintaining steam over night without attention. (G. E. DIXON.)

Boiler Surface in Square feet.	Total Direct Radiation in Square Feet.	Direct Radiation Per Square Foot of boiler surface
40	168	4.20
50	218	4.36
60	272	4.53
80	384	4.80
100	504	5.04
120	626	5.21
140	752	5.37
152	830	5.46
172	962	5.60
194	1114	5.74
211	1232	5.84
252	1522	6.04
292	1816	6.21
295	1840	6.23
347	2240	6.45
399	2642	6.62
421	2820	6.69
482	3321	6.89
541	3818	7.05

The quantities of radiation in the above table are exclusive of all piping.

One square foot of Indirect requires the same boiler capacity as 1½ square feet of Direct Radiation. From John Davis Company's catalogue, by permission.

TEMPERATURE OF STEAM, PRESSURE OF WATER AND CAPACITY OF TANKS.

Degree of Heat Per Lb. Pressure of Steam.		Pressure per Sq. in. per ft. Head of Water.		TANK CAPACITY.	
Pounds Pressure.	Degrees.	Feet Head.	Equals Pressure per sq. in.	Diameter.	Gallons Per Foot of Depth.
0	212	1	.43	2 Feet	23.5
1	215	2	.87	2 " 6 "	36.7
2	219	3	1.30	3 " 6 "	52.9
3	222	4	1.73	3 " 6 "	72.0
4	224	5	2.16	4 " 6 "	94.0
5	227	10	4.33	4 " 6 "	119.0
6	230	15	6.49	5 " 6 "	146.9
7	232	20	8.66	5 " 6 "	177.7
8	235	25	10.82	6 " 6 "	221.5
9	238	30	12.99	6 " 6 "	248.2
10	240	35	15.16	7 " 6 "	287.9
15	250	40	17.32	7 " 6 "	330.5
20	259	45	19.49	8 " 6 "	376.0
25	267	50	21.65	8 " 6 "	424.5
30	274	55	23.82	9 " 6 "	475.9
35	281	60	25.99	9 " 6 "	530.2
40	286	65	28.15	10 " 6 "	587.5
45	292	70	30.32	11 " 6 "	710.9
50	298	75	32.48	12 " 6 "	846.0
55	303	80	34.65	13 " 6 "	992.0
60	307	85	36.82	14 " 6 "	1151.5
65	312	90	38.98	15 " 6 "	1321.9
70	316	95	41.15	20 " 6 "	2350.1
75	320	100	43.31	25 " 6 "	3670.0
80	324	115	49.50	30 " 6 "	5287.7
85	328	130	55.90	35 " 6 "	7197.1
90	331	150	64.50	40 " 6 "	9400.8
95	334	175	75.25		
100	338	200	86.15		

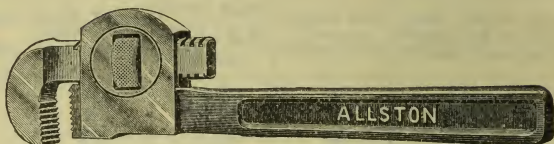
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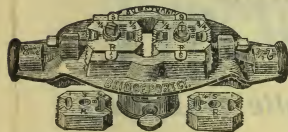
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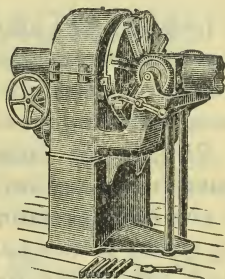
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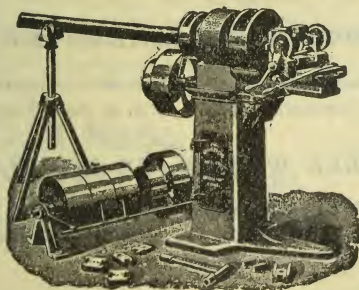
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By means of a thermostat similar to the cut, located in the central part of the house, the dampers are opened and closed directly by the temperature itself, the heat of the rooms furnishing the motive power.

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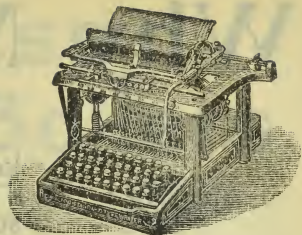
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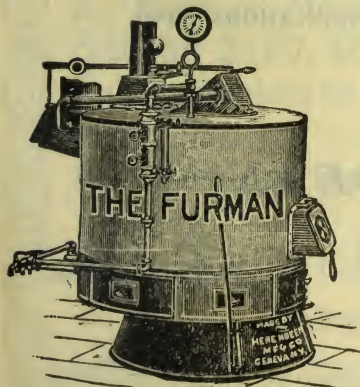
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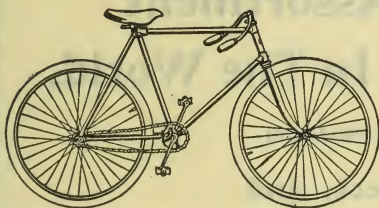
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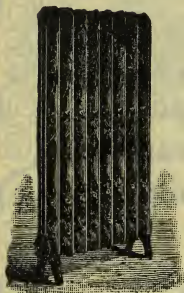


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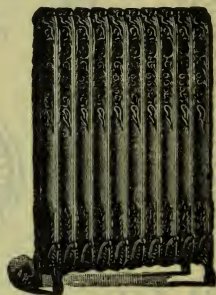
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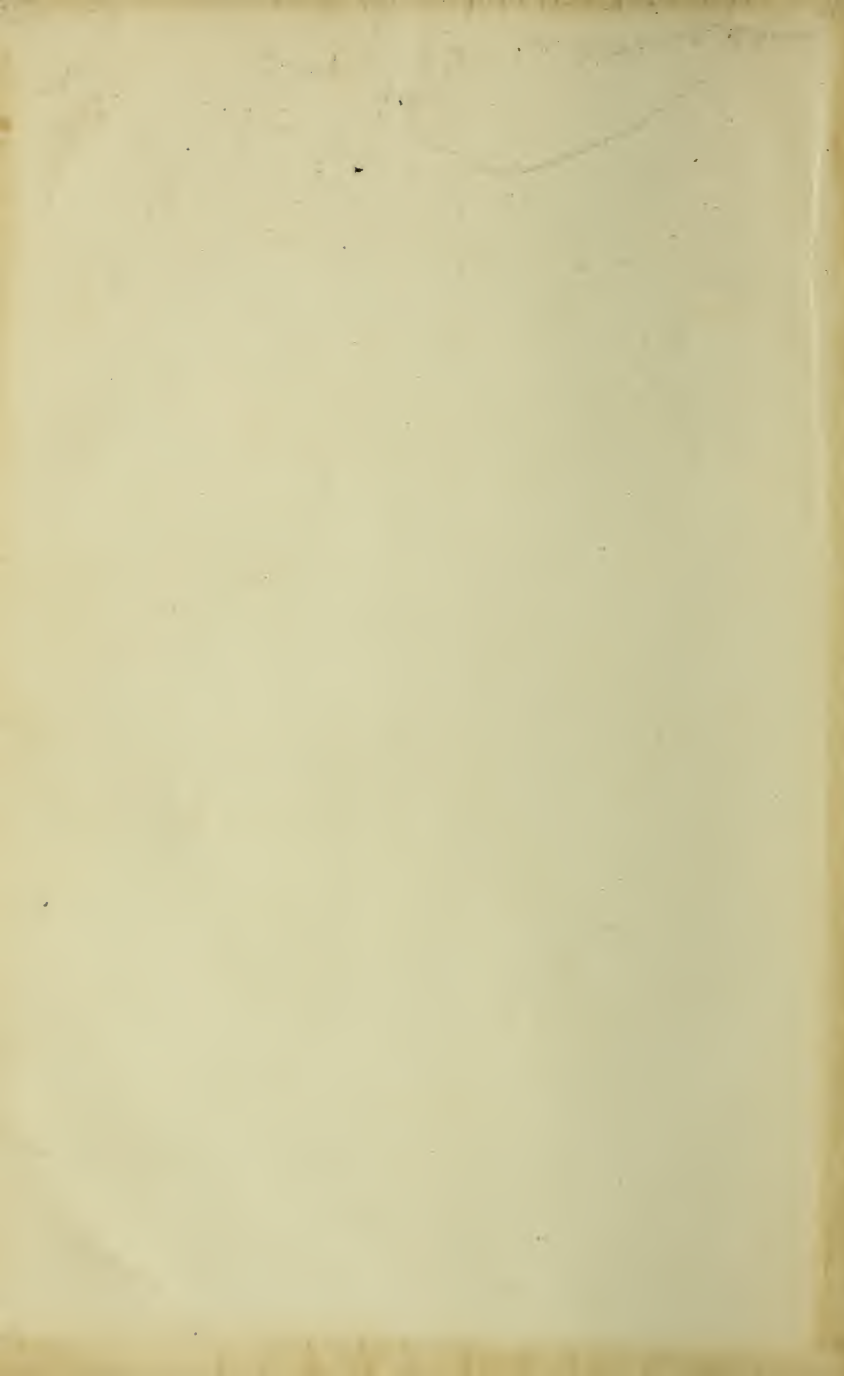


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